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Water, Wastewater, Stormwater,
Transportation, and Parks System
Development Charge Update

Final
Report

Prepared for:

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City of Willamina
2021 Water, Wastewater, Stormwater, Transportation, and Parks
SDC Methodology Update

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Introduction/History of the Project

The City of Willamina conducts periodic updates to its Comprehensive Plan and its various Public Facility Plans to provide orderly and sustainable growth of municipal infrastructure. A key component to funding these public facilities is the system development charge (SDC) program. The purpose of this study is to update the schedule of SDCs for current demographic and demand data along with a newly adopted City-wide capital improvement plan (CIP). The new City-wide CIP was adopted by the City Council on September 14, 2021 via Resolution No. 21-22-005. The City is also proposing to update and formalize SDC methodologies for its water, wastewater, stormwater, transportation, and parks SDCs. The City currently does not charge an SDC for stormwater and parks.

SDCs are one-time charges for new development—designed to recover the costs of infrastructure capacity needed to serve new development. This section describes the policy context and project scope upon which the body of this report is based. It concludes with a numeric overview of the calculations presented in subsequent sections of this report for water, wastewater, stormwater, transportation, and parks SDCs.

In August of 2021, the City hired Donovan Enterprises, Inc. to review and update the water, wastewater, stormwater, transportation, and parks SDC fees. With this review and update, the City has stated a number of objectives:

- Review the basis for charges to ensure they are consistent with the currently adopted SDC methodologies and where appropriate, propose changes and or methodology enhancements;
- Address specific policy, administrative, and technical issues which had arisen from application of the existing SDCs;
- Determine the most appropriate and defensible fees, ensuring that development is paying its way;
- Consider possible revisions to the structure or basis of the charges which might improve equity or proportionality to demand;
- Provide clear, orderly documentation of the assumptions, and results, so that City staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort and was done in close coordination with City staff and available facilities planning documents. The SDC updates comply with Willamina Municipal Code (WMC) chapter 33.15 – 33.30.

Table 1 gives a component breakdown for the current and proposed residential equivalent SDCs for water, wastewater, stormwater, transportation, and parks.

Table 1 - Component Breakdown of the Proposed Residential Equivalent SDCs

Line Item Description	Service Unit	Proposed	Current	Difference
<i>Water:</i>	per 5/8" or 3/4" water meter			
Reimbursement fee		\$14	\$ -	\$14
Improvement fee		4,367	1,848	2,519
Administration fee @5%		219	-	219
Total		\$4,600	\$1,848	\$2,752
<i>Wastewater:</i>	per 5/8" or 3/4" water meter			
Reimbursement fee		\$628	\$ -	\$628
Improvement fee		4,256	2,500	1,756
Administration fee @ 5%		244	-	244
Total		\$5,128	\$2,500	\$2,628
<i>Stormwater:</i>	per Equivalent Residential Unit			
Reimbursement fee		\$ -	\$ -	\$ -
Improvement fee		412	-	412
Administration fee @ 5%		21	-	21
Total		\$433	\$ -	\$433
<i>Transportation:</i>	per detached SF residence			
Reimbursement fee		\$70	\$ -	\$70
Improvement fee		3,875	3,000	875
Administration fee @ 5%		197	-	197
Total		\$4,142	\$3,000	\$1,142
<i>Parks:</i>	per detached SF residence			
Reimbursement fee		\$432	\$ -	\$432
Improvement fee		4,450	-	4,450
Administration fee @ 5%		244	-	244
Total		\$5,126	\$ -	\$5,126
<i>Total SDCs:</i>				
Reimbursement fee		\$1,144	\$ -	\$1,144
Improvement fee		17,360	7,348	10,012
Administration fee @ 5%		925	-	925
Total		<u>\$19,429</u>	<u>\$7,348</u>	<u>\$12,081</u>

Analytical Process for the Methodology Updates

The essential ingredient in the development of an SDC methodology is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the newly formulated and adopted capital improvement plans for water, wastewater, stormwater, transportation, and parks. We have supplemented these data sources with City utility billing records, certified census data, and other documents that we deemed helpful, accurate, and relevant to this study.

Table 2 contains a bibliography of the key documents/sources that we relied upon to facilitate our analysis and hence the resulting SDCs.

Table 2 - Data Sources for the Calculation of SDCs

Service	Master Plan Document and/or Corroborating Source Documentation
Water	<ul style="list-style-type: none"> • City of Willamina Water CIP; September, 2021; Resolution no. 21-22-005 • City of Willamina Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2020 • City of Willamina Water System Fixed Asset Schedule; June 30, 2020; City Records • City of Willamina Utility Billing records for fiscal 2019-2020 • Water meters in service per City Staff; effective January 1, 2021
Wastewater	<ul style="list-style-type: none"> • City of Willamina Wastewater CIP; September, 2021; Resolution no. 21-22-005 • City of Willamina Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2020 • Willamina wastewater system fixed asset schedule; June 30, 2020; City records • City of Willamina Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; January 1, 2021 • City of Willamina monthly wastewater flows to lagoons reports • Portland State University, College of Urban Affairs, Population Research Center; Certified census for Willamina, Oregon; June, 2020
Stormwater	<ul style="list-style-type: none"> • City of Willamina Comprehensive Plan 2015 update • Willamina Residential Buildable Lands Inventory Analysis; September, 2021; Mid-Willamette Valley Council of Governments
Transportation	<ul style="list-style-type: none"> • City of Willamina Comprehensive Plan 2015 update • City of Willamina draft 2020 Transportation System Plan • City of Willamina transportation system fixed asset schedule; June 30, 2020; City records • U.S. Bureau of the Census; American Community Survey: <ul style="list-style-type: none"> ✓ City of Willamina dwelling units; 2019 estimated ✓ City of Willamina number of employees; 2019 estimated • Trip Generation Manual; Institute of Transportation Engineers; 10th Edition
Parks	<ul style="list-style-type: none"> • City of Willamina Parks CIP; September, 2021; Resolution no. 21-22-005 • City of Willamina parks system fixed asset schedule; June 30, 2020; City records • U.S. Bureau of the Census; American Community Survey: <ul style="list-style-type: none"> ✓ City of Willamina population; 2019 estimated ✓ City of Willamina dwelling units; 2019 estimated ✓ City of Willamina number of employees; 2019 estimated • Oregon Department of Parks and Recreation; A guide to Community Park and Recreation Planning for Oregon Communities; April, 2013

The data sources shown in Table 2 were used to formulate the two (2) components of the SDCs. These components are the reimbursement and improvement fees. A brief definition of the two components is:

- *The reimbursement fee* considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.
- *The improvement fee* portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves system capacity to better serve current customers. The costs for this type of project must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of additional equivalent residential units to be served by the City's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes. The improvement fee must also provide a credit for construction of a qualified public improvement.

SDC Legal Authorization and Background

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The statute is specific in its definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development or expansion of existing development and assessed at the time of development approval or increased usage of the system. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property. Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs. In this study, the project team as paid attention to this detail to align future infrastructure costs to those responsible for paying those costs. The reasons for this attention are as follows:

- *Fund Balances* - To the extent that SDC revenue is currently available in fund balance, that revenue should be deducted from its corresponding cost basis. For example, if the city has wastewater improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the wastewater system's improvement fee cost basis to prevent charging twice for the same capacity.
- *Compliance Costs* - ORS 223.307(5) authorizes the expenditure of SDCs on "the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs.

Reimbursement Fee Methodology

The reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. Generally, if a system were adequately sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. However, staged system expansion is needed, and an improvement fee is imposed to allocate those growth-related costs. Even in those cases, the new customer also relies on capacity within the existing system, and a reimbursement component is warranted.

In order to determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to the City's customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both of these points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local facilities, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system, and not already supported by new customers. Tax supported activities fail this test since funding sources have historically been from general revenues, or from revenues which emanate, at least in part, from the properties now developing. Second, the cost basis is allocated between used and unused capacity, and, capacity available to serve growth. In the absence of a detailed asset by asset analysis, it is appropriate to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units over the planning period. This approach reflects the philosophy, consistent with the City's updated master plans, that facilities have been sized to meet the demands of the customer base within the established planning period.

Improvement Fee Methodology

There are three basic approaches used to develop improvement fee SDCs: "standards driven", "improvements-driven", and "combination/hybrid" approaches. The "standards-driven" approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards has been adopted but no specific list of projects is available. The "improvements-driven" approach is based on a specific list of planned capacity increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available, and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the "improvements driven" and "standards-driven" approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

In the past, the City has utilized the “improvements-driven” approach for the calculation of SDCs. This study continues to use this method and has relied on the capital improvement plans that are incorporated in the master plans, and plan updates for the water, wastewater, stormwater, parks, and transportation systems.

For this SDC update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is based on the capital improvement plans established by the City for the municipal services. The costs that can be applied to the improvement fees are those that can reasonably be allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a wastewater collection line that exclusively serves a newly developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be a water distribution reservoir that both expands water storage capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the respective system’s capacity to accommodate growth or increase its respective level of performance have been included in the cost basis of the fee. As part of this SDC update, City Staff and their engineering consultants were asked to review the planned capital improvement lists in order to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City’s evaluation:

Figure 1 - SDC Eligibility Criteria

<p style="text-align: center;">City of Willamina Steps Toward Evaluating <u>Capital Improvement Lists for SDC Eligibility</u></p> <p><u>ORS 223</u></p> <ol style="list-style-type: none">1. Capital improvements mean the facilities or assets used for:<ol style="list-style-type: none">a. Water supply, transmission, storage, and distributionb. Wastewater collection, transmission, treatment, and disposalc. Stormwater, conveyance, detention, treatment, and disposald. Parks, open space, and trails/connectionse. Transportation – intersection improvements, street reconstruction and widening, roadway enhancement, and bike/ped expansion<p>This definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;</p>2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related;3. An increase in system capacity is established if a capital improvement increases the “level of performance or service” provided by existing facilities or provides new facilities.	
<p style="text-align: center;"><u>Under the City’ approach, the following rules will be followed.</u></p> <ol style="list-style-type: none">1. Repair costs are not to be included;2. Replacement costs will not be included unless the replacement includes an upsizing of system capacity and/or the level of performance of the facility is increased;3. New regulatory compliance facility requirements fall under the level of performance definition and should be proportionately included;4. Costs will not be included which bring deficient systems up to established design levels.	

In developing the improvement fee, the project team in consultation with City staff evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by the City. The improvement fee is calculated as a function of the estimated number of projected additional Equivalent Residential Units for water, wastewater, stormwater, and parks over the planning horizon.

We measure demand for transportation facilities in PM Peak Hour Vehicle Trips. An industry standard for allocating demands on a transportation system is to proportion the costs based on the relative number of trips created by a development. Trips are technically referred to as PMPHVTs, and trip rates are published by the Institute of Transportation Engineers (ITE) for various land uses. Once the future costs to serve growth

have been segregated (i.e., the numerator), they can be divided into the total number of new PMPHVTs that will use the capacity derived from those investments (i.e., the denominator).

Methodology for the Granting of Credits, Discounts, and Exemptions

SDC Credits Policy

ORS 223.304 requires that credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval, is identified in the Capital Improvement Plan, and either is not located on or contiguous to property that is the subject of development approval or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the particular development project. The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the particular project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project. In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the Capital Improvement Plan, or provide a share of the cost of an improvement by other means.

The City has adopted a policy for granting SDC credits and has codified this policy in the Willamina Municipal Code (WMC) §33.27. The adopted SDC credit policy consists of the following items:

WMC §33.27

- A. A system development charge shall be imposed when a change of use of a parcel or structure occurs, but credit shall be given for the computed system development charge to the extent that prior structures existed, and services were established on or before July 1, 1991. The credit so computed shall not exceed the calculated system development charge. No refund shall be made on account of this credit.
- B. A credit shall be given for the costs of a qualified public improvement which is located partially on and partially off the parcel that is the subject of the development approval. The credit shall be given only for the cost of the portion of the improvement not located on or wholly contiguous to the property. The credit provided for by this division shall be only for the improvement fee charges for the type of improvement being constructed and shall not exceed the improvement fee even if the cost of the capital improvement exceeds the applicable improvement fee.
- C. Credit shall not be transferable from one development to another, except in compliance with standards adopted by the City Council.
- D. Credit shall not be transferable from one type of capital improvement to another.

SDC Discount Policy

The City, at its sole discretion may discount the SDC rates by choosing not to charge a reimbursement fee for excess capacity, or by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC rates may also be applied on a pro-rata basis to any identified deficiencies, which must be funded from sources other than improvement fee SDCs. The portion of growth-required costs to be funded with SDCs must be identified in the CIP. Because discounts reduce SDC revenues, they increase

the amounts that must come from other sources, such as user fees or general fund contributions, in order to acquire the facilities identified in the updated master plan(s).

Partial and Full SDC Exemption

The City may exempt certain types of development, from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees and property taxes. As in the case of SDC credits, the City has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in WMC §33.26, and is as follows:

- A. Structures and uses established and existing on or before July 1, 1991, are exempt from system development charges imposed by this subchapter, except water and sewer charges, to the extent of the structure or use then existing and to the extent of the parcel of land as it is constituted on that date. Structures and uses affected by this division shall pay the water or sewer charges pursuant to the terms of this subchapter upon the receipt of a permit to connect to the water or sewer system.
- B. Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the State Uniform Building Code, are exempt from all portions of the system development charge.
- C. An alteration, addition, replacement, or change in use that does not increase the parcel's or structure's use of the public improvement facility is exempt from all portions of the system development charge.

Water SDCs

Water Capital Improvement Plan

As discussed in the introduction of this report, the City Council adopted a new City-wide CIP on September 14, 2021. For this water SDC update, the water CIP was reviewed for accuracy with City Staff and where appropriate amended. This amendment process consisted of two steps. The first step was to eliminate master plan projects that City Staff deemed unnecessary at the current time due to the very long lead times anticipated for their development. The second step in the CIP amendment process was to eliminate the cost of planned projects (or portions of projects) that have been funded and constructed since the adoption of the last water master plan. In this case, the planned future costs are deducted from the CIP. The actual costs spent on these projects were capitalized by the City, and now reside in the water system fixed asset inventory (i.e., balance sheet assets). These historical costs will be included in the reimbursement fee calculations.

The amended water system CIP now consists of future projects that remain a 20-year priority for the City, and only consists of projects yet to be completed. The resulting CIP that was used for this SDC update is shown in summary form in Table 3.

Table 3 – Adopted 2021 Water System Capital Improvement Plan

			Funding Sources							
ID#	Item Description	June, 2021 Est.	City	SDCs	Urban Renewal	State/ODOT	Federal Grants	LID or Utility	Developer	Total
Priority 1 Improvements										
1B	Rezoning 5th Street and Pacific Hills Drive	\$ 1,166,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1C	8-inch loop between Main Street and Willamina Drive	479,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1D	Rehab and Install Control Valves between Existing Zones	127,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1E	Additional Fire Hydrants	70,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1F	Reservoir Improvements	1,227,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1G	Booster Station Improvements - Hill Drive	84,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1H	Water Treatment Plant Improvements	973,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1I	Interim Intake Improvements	Completed	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1L	WTPFPS	150,000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1N	Leak Detection Study	12,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal priority 1 improvements		\$ 4,288,000	\$ 3,940,000	\$ 348,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,288,000
Water System Improvement Projects										
1A	10-inch Main to High School and Associated Rezoning	\$ 1,519,830	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100%
1G	Booster Station Improvements - 6th Street	766,935	37.00%	0.00%	0.00%	0.00%	63.00%	0.00%	0.00%	100%
1J	Long-term Intake Improvements	428,200	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1K	Raw Water Improvements	428,200	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1M	WMCP Update	-	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1P	12-Inch Main from RWPS to WTP	1,949,800	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	SCADA and Controls Upgrade	163,600	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Misc. WSI Items	813,400	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal water system improvement projects		\$ 6,069,965	\$ 3,726,478	\$ 340,488	\$ -	\$ -	\$ 2,002,999	\$ -	\$ -	\$ 6,069,965
Additional Panning Costs for Water System Improvement Projects										
N/A	Engineering	\$ 396,833	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Survey	21,600	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Environmental Review	22,200	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Water Rights Update	11,300	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Geotechnical Study	21,600	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Flood Study	26,800	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Permitting	50,300	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Amendment 01	-	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Amendment 02	275,812	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	Amendment 03	74,019	79.00%	21.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal planning costs		\$ 900,464	\$ 711,367	\$ 189,097	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 900,464

Table 3 – Adopted 2021 Water System Capital Improvement Plan Continued

			Funding Sources							
ID#	Item Description	June, 2021 Est.	City	SDCs	Urban Renewal	State/ODOT	Federal Grants	LID or Utility	Developer	Total
Priority 2 Improvements										
2A	8-inch Main along Fir Street	\$ 481,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2B	8-inch Main along Oak Street	477,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2C	Additional Fire Hydrants	20,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2D	Water Treatment Plant Improvements	75,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2E	10 Year WMP Update	150,000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2F	WMCP Progress Report	10,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	10 Year WMCP Update	25,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal priority 2 improvements		\$ 1,238,000	\$ 1,063,750	\$ 174,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,238,000
Priority 3 Improvements										
3A	8-inch Main along Willamina Drive	\$ 491,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3B	8-inch Loop along Maple Street	264,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3C	8-inch Main along Ivy Street	165,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3D	8-inch Loop from Yamhill Street to Highway 18 and 6-inch Main	514,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3E	8-inch Main along SW Hill Drive	178,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3F	8-inch Loop from E Street to 4th Place	130,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3G	8-inch Loop from Adams Street to Jackson Street	143,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3H	8-inch Loop from Willow Lane	108,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3I	8-inch loop from E Street to Highway 18	350,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3J	Additional Fire Hydrants	6,000	87.00%	13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3K	Rehab Control Valves between Existing Zones	59,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3L	Reservoir Improvements	344,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3M	Booster Station Improvements	511,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3N	20 Year WMP	150,000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N/A	15 Year WMCP Progress Report	10,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
3O	20 Year WMCP Update	25,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal priority 3 improvements		\$ 3,448,000	\$ 3,202,770	\$ 245,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,448,000
Transportation System Total		\$ 15,944,429	\$ 12,644,365	\$ 1,297,065	\$ -	\$ -	\$ 2,002,999	\$ -	\$ -	\$ 15,944,429

Water Customers Current and Future Demographics

Existing Water Demand and Population Growth

Current Willamina water demands are based on historical customer billing records, and actual water sales and water meters in service as of January 1, 2021. Projected demands are estimated based on a forecasted population growth rate of 0.98 percent per year within the City's existing urban growth boundary. This annual population growth factor is based on the population forecasts prepared by the Population Research Center at Portland State University (June, 2020).

Estimated Demand per Equivalent 5/8" or 3/4" Water Meter

The City principally serves single-family residential customers and to a lesser extent, small commercial and industrial customers. Single-family residential water services generally have a consistent daily pattern of water use whereas water demands for multifamily residences, commercial and industrial users may vary significantly from service to service depending on the number of multifamily units per service or the type of commercial enterprise. When projecting future water demands based on population change, the water needs of nonresidential and multi-family residential customers are represented by comparing the water use volume at these services to the average single-family residential water service. A method to estimate this relationship is to calculate "equivalent dwelling units (EDUs)". In the case of Willamina, the standard residential unit of demand is the rated capacity (in gallons per minute) of the 5/8" and 3/4" water meter. As of January 1, 2021, the City had 879 active water meters in service, 822 of which were 5/8" x 3/4" and 3/4" x 3/4" meters serving single family residential customers. The City also serves one very large industrial customer, Hampton Lumber, Inc. which represents 26% of total water sales in calendar 2020. The process for calculating equivalent 3/4" meters is shown below in Table 4.

Table 4 – Estimated 3/4" Equivalent Meters in Service as of January 1, 2021

Meter Size	Accounts*	2020 Usage		Water EDUs
		Gallons*		
Residential	822	42,741,655	822	64%
Commercial	27	3,418,375	66	5%
Industrial (excluding lumber mill)	4	1,591,579	31	2%
Church/school	15	363,199	7	1%
Community service	9	1,359,370	26	2%
Lumber mill	2	17,816,597	343	26%
Total	879	67,290,775	1,294	100%

* - City of Willamina utility billing system records

Projected Demands

The planning horizon for the master plan is approximately 20 years, through the year 2040. That is the forecast horizon that is used for the water SDC update. In the 2014 master plan, an estimated number of EDUs per acre for each land use type was established based on (then) current water demands by customer

class and total developed land area by land use type. Land use type is analogous to customer class, which is to say the land use or zoning of a particular property reflects the type of water service, such as residential or commercial, provided to that property. The estimated number of potential EDUs per acre was applied to developable land within the existing water service area to estimate water demand.

For this SDC update, the project team did not use the old master plan strategy to forecast future water demand based on land use. With the benefit of actual water sales and meters in service, and a population growth forecast that is predicated on existing growth trends for the City a forecast of future equivalent $\frac{3}{4}$ " meters was developed. Based upon these decision rules, the forecast of equivalent meters in use for this water SDC update are shown below in Table 5.

Table 5 – Forecast of Equivalent $\frac{3}{4}$ " Meters for the 2021 Water SDC Update Study

	2020	CAGR ¹	2040
Total number of 3/4" meter equivalents 2020	1,294		
Compound annual growth in Willamina population		0.98%	
Projected number of 3/4" meter equivalents 2040			1,574
Projected growth in 3/4" meter equivalents			280

¹ Compound Annual Growth Rate

Reimbursement Fee Calculations

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. In theory, this should be a simple calculation. Simply go to the Utility's balance sheet, find the book value of assets in service, and divide that cost by the number of forecasted new connections to the water system. That is a simple calculation, and it is wrong. In order to determine an equitable reimbursement, we have to account for some key issues of rate equity;

- First, the cost of the system to the City's existing customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources.
- Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.
- Third, the accounting treatment of asset costs generally has no relationship to the capacity of an asset to serve growth. In the absence of a detailed asset by asset analysis detailed in the balance sheet (or fixed asset schedule), a method has to be used to allocate cost to existing and future users of the asset. Generally, it is industry practice to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units (i.e., equivalent $\frac{3}{4}$ " meters) over the planning period.

- Fourth, the Oregon SDC statute has strict limitations on what type of assets can be included in the basis of the reimbursement fee. ORS 223.299 specifically states that a “capital improvement” does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

For this water SDC methodology update, the following discrete calculation steps were followed to arrive at the recommended water reimbursement fee.

- Step 1: Calculate the original cost of water fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of water fixed assets**.
- Step 2: Subtract from the adjusted original cost of water fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of water fixed assets in service**.
- Step 3: Subtract from the modified book value of water assets in service any grant funding or contributed capital. This arrives at the **modified book value of water fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of water fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives at a **gross water reimbursement fee basis**.
- Step 5: Subtract from the gross water reimbursement fee basis the fund balance held in the Water Reimbursement SDC fund (if available). This arrives at the **net water reimbursement fee basis**.
- Step 6: Divide the net water reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total water reimbursement fee is shown below in Table 6.

Table 6 - Calculation of the Water Reimbursement Fee

Line Item Descriptions	Amount
Utility Plant-in-Service (original cost): ¹	
1400 Land	\$ 122,298
1410 Systems	1,708,039
1420 Land Improvements	388
1430 Buildings	605,516
1440 Equipment	167,698
1460 Vehicles	Eliminated
Total Utility Plant-in-Service	\$ 2,603,939
Accumulated depreciation ¹	
1400 Land	\$ -
Source of supply	1,414,471
Treatment	388
Storage	343,563
Transmission and distribution	115,995
Water Rights	Eliminated
Total accumulated depreciation	\$ 1,874,416
Book value of water utility plant-in-service @ June 30, 2020	\$ 729,523
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable:	
Series 2000 water revenue bonds	708,093
Developer Contributions	-
Grants, net of amortization	-
Total eliminating entries	708,093
Net basis in utility plant-in-service available to serve future customers	\$ 21,430
Estimated existing and future 3/4" Meter Equivalents (MEs)	1,574
Calculated reimbursement fee - \$ per 3/4" ME	\$ <u>14</u>

¹ Source: Willamina Accounting Summary Report - Capitalized Assets as of June 30, 2020

Improvement Fee Calculations

The calculation of the water improvement fee is more streamlined than the process used to calculate the water reimbursement fee. This study continues to use the improvements-driven method and has relied on the 2021 water system capital improvement plan. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Water Improvement SDC Fund. This arrives at **the net water improvement fee basis**.
- Step 3: Divide the net water improvement fee basis by the forecasted number of growth equivalent $\frac{3}{4}$ " meters over the planning period. This arrives at **the total water improvement fee**.

The actual data that was used to calculate the total water improvement fee is shown below in Table 7.

Table 7 - Calculation of the Water Improvement Fee

Project Description	Total Cost	SDC	
		Ineligible	Eligible
Priority 1 Improvements	\$ 4,288,000	\$ 3,940,000	\$ 348,000
Water System Improvement Projects	6,069,965	5,729,477	340,488
Additional Planning Costs for Water System Improvement Projects	900,464	711,367	189,097
Priority 2 Improvements	1,238,000	1,063,750	174,250
Priority 3 Improvements	3,448,000	3,202,770	245,230
	<u>\$ 15,944,429</u>	<u>\$ 14,647,364</u>	<u>\$ 1,297,065</u>
	100%	92%	8%
Total Improvement Fee Eligible Costs for Future System Improvements			\$ 1,297,065
less: Water improvement SDC Fund balance as of June 30, 2020			<u>74,360</u>
Adjusted Improvement Fee Eligible Costs for Future System Improvements			\$1,222,705
Total Growth in 3/4" Meter Equivalents (20 year forecast)			280
Calculated Water Improvement Fee SDC per Meter Equivalent			<u><u>\$4,367</u></u>

Water SDC Model Summary

The 2021 water SDC update was done in accordance with Willamina Municipal Code Chapter 33, and with the benefit of adopted plan updates for water services. We recommend the City update the SDC charge to reflect the current capital improvement program. A comparison of the proposed and current water SDCs for the average single-family residential customer is shown below in Table 8.

Table 8 - Proposed and Current Water SDCs for a 5/8" or 3/4" Meter

Water SDC Components	Proposed	Current	Difference
Reimbursement fee	\$ 14	\$ 14	
Improvement fee	4,367	1,848	2,519
Administration fee at 5%	219	-	219
Total water SDC	<u>\$ 4,600</u>	<u>\$ 1,848</u>	<u>\$ 2,752</u>

For water meters larger than $\frac{3}{4}$ ", the project team has developed a schedule of SDCs based on the general design criteria for meters that are installed in the Willamina water service area. This criterion is from the

standard approach of using American Water Works Association design criteria for displacement and compound water meters.

The resulting schedule of water SDCs for the array of potential meter sizes is shown below in Table 9.

Table 9 - Proposed Schedule of Water SDCs by Potential Water Meter Size

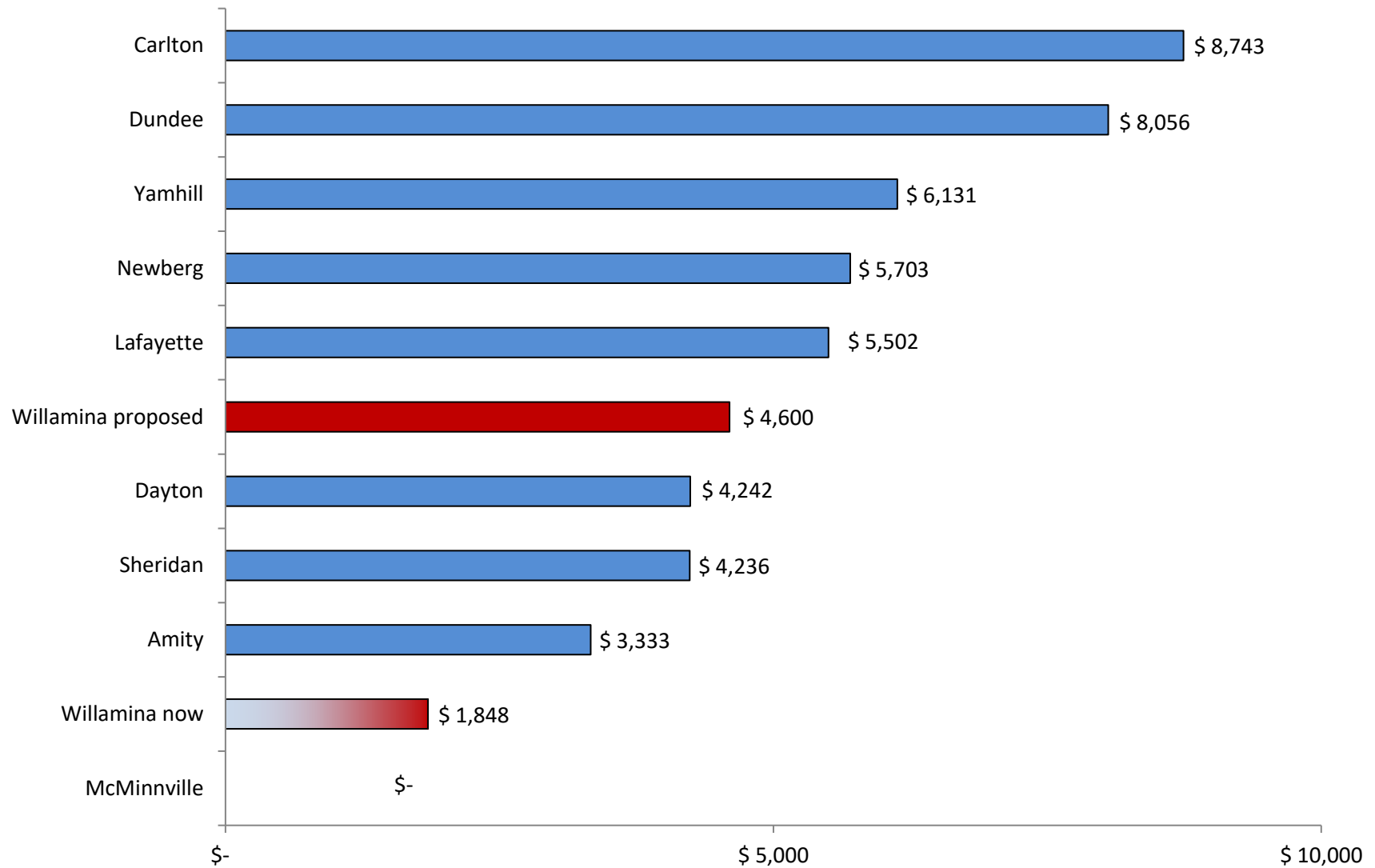
Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Water SDCs			
			Reimbursement	Improvement	Administration	Total
0.625"x 0.75" - Displacement Multi-jet	30	1.00	\$ 14	\$ 4,367	\$ 219	\$ 4,600
0.75"x 0.75" - Displacement Multi-jet	30	1.00	14	4,367	219	4,600
1.00 inch - Displacement Multi-jet	50	1.67	23	7,278	365	7,666
1.50 inch - Displacement Class I Turbine	100	3.33	47	14,555	730	15,332
2.00 inch - Displacement or Class I & II Turbine	160	5.33	75	23,289	1,168	24,531
3.00 inch - Displacement	300	10.00	140	43,666	2,190	45,996
4.00 inch - Displacement or Compound	500	16.67	233	72,777	3,650	76,661
6.00 inch - Displacement or Compound	1000	33.33	467	145,555	7,300	153,321
8.00 inch - Compound	1600	53.33	747	232,887	11,680	245,314

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Water SDCs in Neighboring Communities

Shown below in Figures 2 is a chart that compares the current and proposed water SDC for a single-family customer in Willamina to the same charge in similar communities in Yamhill County.

Figure 2 - Neighboring Communities' Water SDCs (Detached Single Family) July, 2021



Wastewater SDCs

Wastewater Capital Improvement Plan

As in the case of the water SDCs, the principal sources of data for the wastewater system CIP are the 2021 capital improvement plans for wastewater treatment, pumping stations, and collection systems. City Staff have periodically updated these plans for current development conditions. With the assistance of City Staff, the project team has summarized the wastewater system CIPs for this SDC update. The 2021 wastewater system CIP is shown in Table 10.

Table 10 - 2021 Wastewater System CIP

			Funding Sources							
ID#	Item Description	June, 2021 Est.	City	SDCs	Urban Renewal	State/ODOT	Federal	LID or Utility	Developer	Total
<i>Sewer System Improvements</i>										
1A	South Lift Station	\$ 283,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1B	E Street	279,000	75.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
1C	SW Hill Drive	347,000	92.00%	8.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2A	WWTP Ammonia Control	-	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2B	WWTP Temperature Control	-	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2C	Sludge Cleanout	1,000,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2D	Lagoon Relining	1,000,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2E	WWFPS	139,700	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2F	Upgrading Main Lines and Manholes	7,041,000	91.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2G	Purple Pipe to Football Fields	3,116,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
		13,205,700								
Sewer System Total		\$ 13,205,700	\$ 12,013,300	\$ 1,192,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,205,700

Wastewater Customers Current and Future Demographics

Existing Wastewater Demand and Population Growth

Current Willamina wastewater demands documented in monthly wastewater flow reports are based on Average Annual Dry Weather Flows (AADWF) to the City's facultative treatment lagoon systems. These flows are expressed in million gallons per day (MGD) figures. For the purpose of this wastewater SDC update, the project team had to translate these MGD figures into standard billing units used for charging out SDCs. In this case, those standard billing figures are expressed in EDUs. In the wastewater industry, an EDU is typically defined as the amount of wastewater a single-family residential customer contributes to the wastewater system during an average month in the winter, where winter is defined as November through April. We have estimated the winter average water consumption for the single-family residential customer class. For the winter period November, 2019 through April, 2020, we estimate the average single-family residential customer contributes 3,591 gallons of water to the wastewater system in the average winter month. This figure translates to 118 gallons per day.

Forecasted EDUs

With this historical consumption data in hand, the project team was able to calculate the number of EDUs relative to the AADWF data from the wastewater treatment system monitoring data that gets reported to the Oregon Department of Environmental Quality on a monthly basis. The EDU calculation methodology is shown in Table 11.

Table 11 - Forecast of Current and Future Wastewater EDUs

	2019	2040	Growth	CAGR ¹
Population Forecast	2,439	2,996	557	0.9842%
Average Dry Weather Flow (ADWF) Monthly MG ²	4.3144	5.2996	0.9852	0.9842%
Observed Willamina EDU				
Winter average Kgal per month - Single Family Residential ³	3.5909	3.5909		
Gallons per day - SFR	118.06	118.06		
Estimated EDUs based on ADWF and observed Willamina SFR winter average metered water consumption	1,201	1,476	274	0.9842%

¹ CAGR - Compounded Annual Growth Rate

² Source: City of Willamina Discharge Monitoring Reports 2020

³ Source: City of Willamina utility billing system records

Reimbursement Fee Calculations

The wastewater reimbursement fee methodology mirrors that used for the water reimbursement fee. The methodological steps in its construction are restated here.

- Step 1: Calculate the original cost of wastewater fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of wastewater fixed assets**.
- Step 2: Subtract from the adjusted original cost of wastewater fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of wastewater fixed assets in service**.
- Step 3: Subtract from the modified book value of wastewater assets in service any grant funding or contributed capital. This arrives at the **modified book value of wastewater fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of wastewater fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This includes the principal balance on the Clean Water State Revolving loan that has yet to be repaid. This arrives a **gross wastewater reimbursement fee basis**.
- Step 5: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Wastewater Reimbursement SDC fund (if available). This arrives at the **net wastewater reimbursement fee basis**.
- Step 6: Divide the net wastewater reimbursement fee basis by future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total wastewater reimbursement fee is shown below in Table 12.

Table 12 - Calculation of the Wastewater Reimbursement Fee

Line Item Descriptions	Amount
Utility Plant-in-Service (original cost): ¹	
1400 Land	\$ 426,426
1410 Systems	3,560,287
1420 Land Improvements	388
1430 Buildings	313,738
1440 Equipment	325,855
1460 Vehicles	Eliminated
Total Utility Plant-in-Service	\$ 4,626,694
Accumulated depreciation*	
1400 Land	\$ -
1410 Systems	2,234,161
1420 Land Improvements	388
1430 Buildings	121,704
1440 Equipment	288,782
1460 Vehicles	Eliminated
Total accumulated depreciation	\$ 2,645,035
Book value of wastewater utility plant-in-service @ June 30, 2020	\$ 1,981,659
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable:	
Series 1999 OECDD loan no. G99003	181,588
Series 2003 OECDD loan no. G03004	873,744
Developer Contributions	-
Grants, net of amortization	-
Total eliminating entries	1,055,332
Net basis in utility plant-in-service available to serve future customers	\$ 926,327
Estimated existing and future EDUs	1,476
Calculated reimbursement fee - \$ per EDU	<u>\$ 628</u>

¹ Source: Willamina Accounting Summary Report - Capitalized Assets as of June 30, 2020

Improvement Fee Calculations

The calculation of the wastewater improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the wastewater treatment, pump stations, and collection systems. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Wastewater Improvement SDC Fund. This arrives at **the net wastewater improvement fee basis**.
- Step 3: Divide the net wastewater improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at **the total wastewater improvement fee**.

The actual data that was used to calculate the total wastewater improvement fee is shown below in Table 13.

Table 13 - Calculation of the Wastewater Improvement Fee

Pjt. #	Project Description	Total Cost	SDC Ineligible	SDC Eligible	Checksum	Checksum Error
1A	South Lift Station	\$ 283,000	\$ 141,500	\$ 141,500	\$ 283,000	\$ -
1B	E Street	279,000	209,250	69,750	279,000	-
1C	SW Hill Drive	347,000	319,240	27,760	347,000	-
2A	WWTP Ammonia Control	-	-	-	-	-
2B	WWTP Temperature Control	-	-	-	-	-
2C	Sludge Cleanout	1,000,000	910,000	90,000	1,000,000	-
2D	Lagoon Relining	1,000,000	910,000	90,000	1,000,000	-
2E	WWFPS	139,700	-	139,700	139,700	-
2F	Upgrading Main Lines and Manholes	7,041,000	6,407,310	633,690	7,041,000	-
2G	Purple Pipe to Football Fields	3,116,000	3,116,000	-	3,116,000	-
	Total	\$ 13,205,700	\$ 12,013,300	\$ 1,192,400	\$ 13,205,700	\$ -

Total Improvement Fee Eligible Costs for Future System Improvements	\$ 1,192,400
less: Sewer improvement fee SDC Fund balance as of June 30, 2020	24,829
Adjusted Improvement Fee Eligible Costs for Future System Improvements	1,167,571
Total Growth in Sewer EDUs (20 year forecast)	274
Calculated Wastewater Improvement Fee SDC per Meter Equivalent	<u>\$ 4,256</u>

Wastewater SDC Model Summary - Residential

The 2021 wastewater SDC update was done in accordance with Willamina Municipal Code Chapter 33, and with the benefit of adopted capital improvement plans and plan updates for wastewater services. We recommend the City update the SDC charge to reflect the current capital improvement program. A comparison of the proposed and current wastewater SDCs for the average single-family residential customer is shown below in Table 14.

Table 14 - Proposed and Current Wastewater SDCs for a 3/4" Meter

Sewer SDC Components	Proposed		Current		Difference
Reimbursement fee	\$	628	\$	-	\$ 628
Improvement fee		4,256		2,500	1,756
Administration fee at 5%		244		-	244
Total water SDC	\$	5,128	\$	2,500	\$ 2,628

For water meters larger than $\frac{3}{4}$ ", the schedule of wastewater SDC uses the same flow factors that were developed for the water SDCs (i.e., AWWA standards for displacement and compound meters). The complete proposed schedule of wastewater SDCs by potential meter size are shown in Table 15.

Table 15 - Proposed Schedule of Residential Wastewater SDCs by Potential Water Meter Size

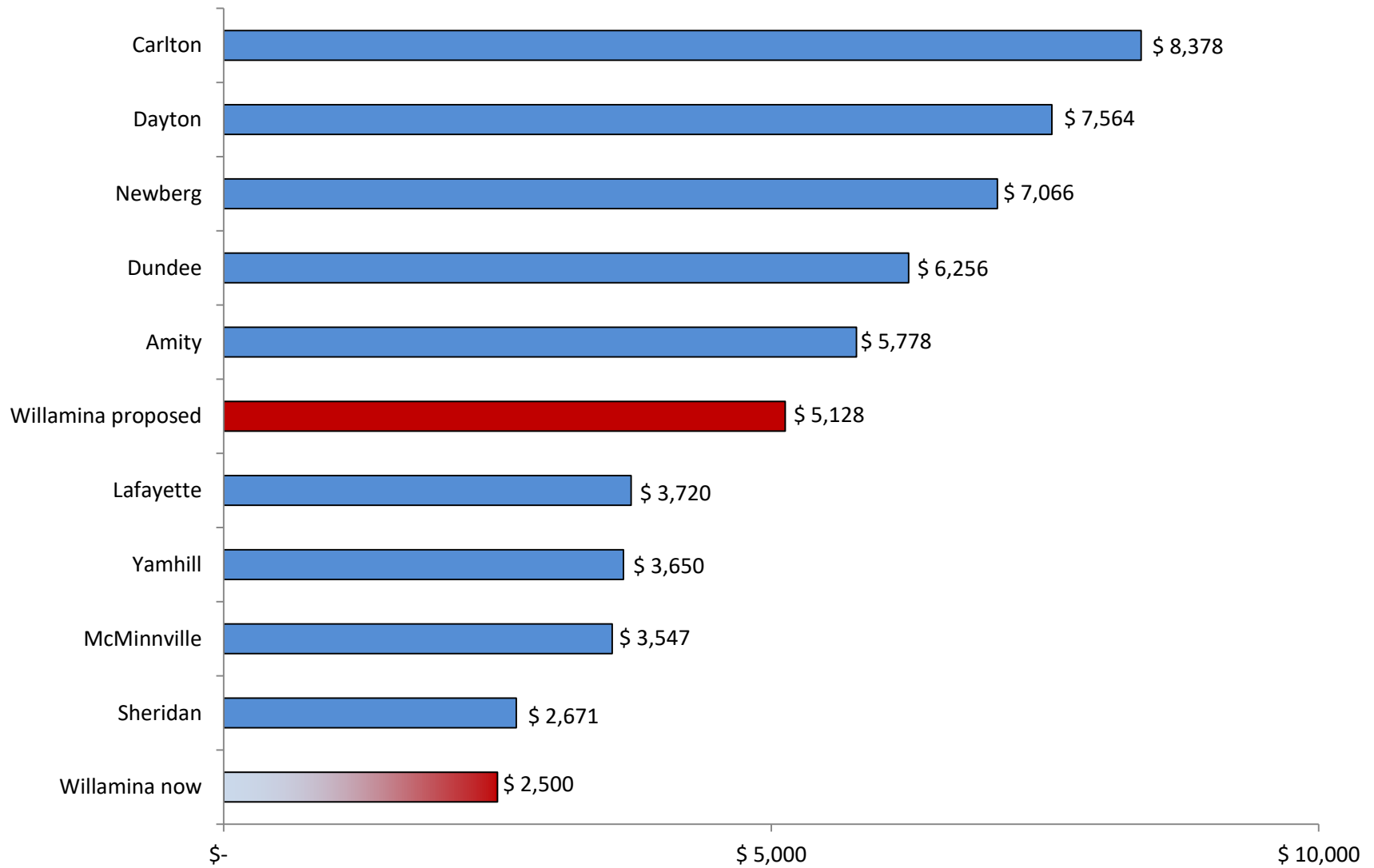
Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Wastewater SDCs			
			Reimbursement	Improvement	Administration	Total
0.625"x 0.75" - Displacement Multi-jet	30	1.00	\$ 628	\$ 4,256	\$ 244	\$ 5,128
0.75"x 0.75" - Displacement Multi-jet	30	1.00	628	4,256	244	5,128
1.00 inch - Displacement Multi-jet	50	1.67	1,047	7,093	407	8,547
1.50 inch - Displacement Class I Turbine	100	3.33	2,093	14,187	813	17,093
2.00 inch - Displacement or Class I & II Turbine	160	5.33	3,349	22,699	1,301	27,349
3.00 inch - Displacement	300	10.00	6,280	42,560	2,440	51,280
4.00 inch - Displacement or Compound	500	16.67	10,467	70,933	4,067	85,467
6.00 inch - Displacement or Compound	1000	33.33	20,933	141,867	8,133	170,933
8.00 inch - Compound	1600	53.33	33,493	226,987	13,013	273,493

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Wastewater SDCs in Neighboring Communities

Shown below in Figures 3 is a chart that compares the current and proposed wastewater SDC for a single-family customer in Willamina to the same charge in similar communities in Yamhill County.

Figure 3 - Neighboring Communities' Wastewater SDCs (Detached Single Family) July, 2021



Stormwater SDCs

Stormwater Capital Improvement Plan

The principal source of data for the stormwater system CIP is the 2021 City-wide CIP. City Staff have periodically updated these plans for current development conditions. With the assistance of City Staff, the project team has summarized the 2021 stormwater system CIPs for this SDC update. The 2021 stormwater system CIP is shown in Table 16.

Table 16 - 2021 Stormwater System CIP

				Funding Sources						
ID#	Item Description	June, 2021 Est.		Urban					Developer	Total
				City	SDCs	Renewal	State/ODOT	Federal		
Storm System Improvements										
1	Prototype storm CIP	\$	8,100,000	90.99%	9.01%	0.00%	0.00%	0.00%	0.00%	100%
2				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
4				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
5				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
6				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
7				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
8				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
9				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
	Stormwater System Total	\$	8,100,000	\$ 7,370,000	\$ 730,000	\$ -	\$ -	\$ -	\$ -	\$ 8,100,000

Stormwater Customers Current and Future Demographics

Existing Stormwater Demand and Population Growth

The City does not currently charge a stormwater SDC on new development based upon impervious surface. For this analysis, we are assuming the average amount of impervious area on a single family residential developed lot within the City is 2,500 square feet. This equates to one “equivalent service unit” or ESU. SDCs are then calculated as a function of ESUs meaning that each property’s fee is calculated as follows:

$$\text{Estimated Impervious Surface} \div 2,500 \text{ square feet} = \text{Number of ESUs}$$

The number of ESUs is then multiplied by the unit rate to determine the SDC amount. The number of ESUs currently connected to the City’s system is 2,938 as estimated from comprehensive plan land use designations and developed parcels as estimated from data provided by the City’s planning consultants (Mid-Willamette Valley Council of Governments). In order to determine the future capacity requirements of the City’s stormwater system, each basin plan and facility plan forecasts the amount of additional impervious surface through the planning period. This forecast is based on future land use conditions and the corresponding runoff coefficients assigned to these various land uses. The future growth in ESUs within each of the City’s existing basins and planning areas is based on these specific land use and impervious surface projections.

Forecasted Equivalent Service Units (ESUs)

With current stormwater demand estimated at 2,938 ESUs, the project team was able to calculate the number of ESUs at buildout using the City’s Comprehensive Plan out to 2040. These inventories are predicted on the currently approved urban growth boundary (UGB) of the City. As discussed above, the forecast is based on the future land use conditions and the corresponding runoff coefficients assigned to the Comprehensive Plan land use designations. The forecast eliminates lands that are constrained from future development due to severe slopes, wetlands, and riparian corridors.

- *Residential lands* – Based on conversations with City planning staff, the planning standard used to calculate future residential land needs for the City is six (6) dwelling units per acre for single-family residential, seven (7) dwelling unit per acre for two-family residential, and 14 dwelling units per acre for multifamily residential. For the calculation of build out impervious surface contributions from residential lands, the project team has also used these planning standards.
- *Commercial lands* – In consultation with the City’s engineering staff, the project team has applied a uniform runoff coefficient of .90 (i.e., 90%) to all commercial lands within the UGB. This average value was used based on analysis of general commercial land uses over a range of soils. The data sources for this analysis included the National Resource Conservation Service’s Hydrologic manual, Oregon Department of Transportation Department’s design standards for stormwater facilities, and the Caltrans Storm Water Quality Handbook SWPPP/WPCP Preparation Manual.
- *Industrial lands* – Also in consultation with City engineering staff, a uniform runoff value of .85 (i.e., 85%) was applied to all industrial lands in the UGB. The same data sources used to arrive at the commercial runoff coefficient was used for the derivation of the industrial value.

The growth ESU forecast methodology is shown in Table 17.

Table 17 - Forecast of Growth in Stormwater ESUs

ZD Code	Zoning District Description	Gross Acres		Total V + R In City Limits ¹	Dwelling Units		Impervious Surface			ESUs
		Vacant	Redevelopable		Dwelling Units	per Gross Acre	Coverage	Acres	Square Feet	
C-1	General Commercial	3.74	-	3.74			90%	3.36	146,509.05	58.60
C-2	Commercial Residential	2.25	-	2.25			90%	2.02	88,017.97	35.21
C-3	Commercial Industrial	0.99	-	0.99			90%	0.89	38,909.35	15.56
HI	Heavy Industrial	-	-	-						
M-1	Industrial	24.11	-	24.11			85%	20.50	892,817.96	357.13
P	Public Open Space	-	-	-			0%	-	-	-
PAI	Public Assembly Institutional	-	-	-			55%	-	-	-
R-1	Single-Family Residential	79.08	13.19	92.27	553.61	6	2500 sq. ft.	31.77	1,384,024.29	553.61
R-2	Two-Family Residential	39.00	38.29	77.30	541.07	7	2500 sq. ft.	31.05	1,352,665.27	541.07
R-3	Multi-Family Residential	13.44	11.40	24.84	347.69	14	1500 sq. ft.	11.97	521,540.53	208.62
SR	Suburban Residential	-	-	-			-	-	-	-
No Zone ²		18.70	-	18.70			-	-	-	-
		181.31	62.87	244.19				101.57	4,424,484.41	1,769.79

¹ Source - Mid-Willamette Valley Council of Governments estimates; August 31, 2021

² Roads, rights of way polygons, easements

Reimbursement Fee Calculations

The City does not have a fixed assets inventory for storm and surface water management infrastructure. Historically, trunk drainage system investment costs have been treated as a component cost of street improvement. Hence these costs will be reflected in the streets/transportation reimbursement fee. For this 2021 stormwater SDC analysis, the project team has assumed a zero (0) stormwater reimbursement fee.

Improvement Fee Calculations

The calculation of the stormwater improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the stormwater systems. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Stormwater Improvement SDC Fund. This arrives at **the net stormwater improvement fee basis**.
- Step 3: Divide the net stormwater improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at **the total stormwater improvement fee**.

The actual data that was used to calculate the total stormwater improvement fee is shown below in Table 18.

Table 18 - Calculation of the Stormwater Improvement Fee

Project Description	Total Cost	SDC Ineligible	SDC Eligible
<i>Stormwater Master Plan CIP:</i> ¹			
Prototype storm CIP	\$ 8,100,000	\$ 7,370,000	\$ 730,000
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	<u> </u>	<u> </u>	<u> </u>
Total	\$8,100,000	\$7,370,000	\$730,000
Total Improvement Fee Eligible Costs for Future System Improvements			\$730,000
less: Stormwater improvement SDC fund balance June 30, 2020			<u>-</u>
Adjusted Improvement Fee Eligible Costs for Future System Improvements			\$730,000
 Total growth ESUs			 1,770
Calculated stormwater Improvement Fee SDC per EDU			\$412
Calculated stormwater Improvement Fee SDC per square foot of Impervious surface			\$0.1648

¹ Allocations from City staff

Stormwater SDC Model Summary

The 2021 stormwater SDC methodology update was done in accordance with Willamina Municipal Code Chapter 33, and with the benefit of adopted capital improvement plans and plan updates for stormwater services. We recommend the City implement the stormwater SDC charge and methodology to reflect the current capital improvement program. The proposed stormwater SDCs for the average single-family residential customer is shown below in Table 19.

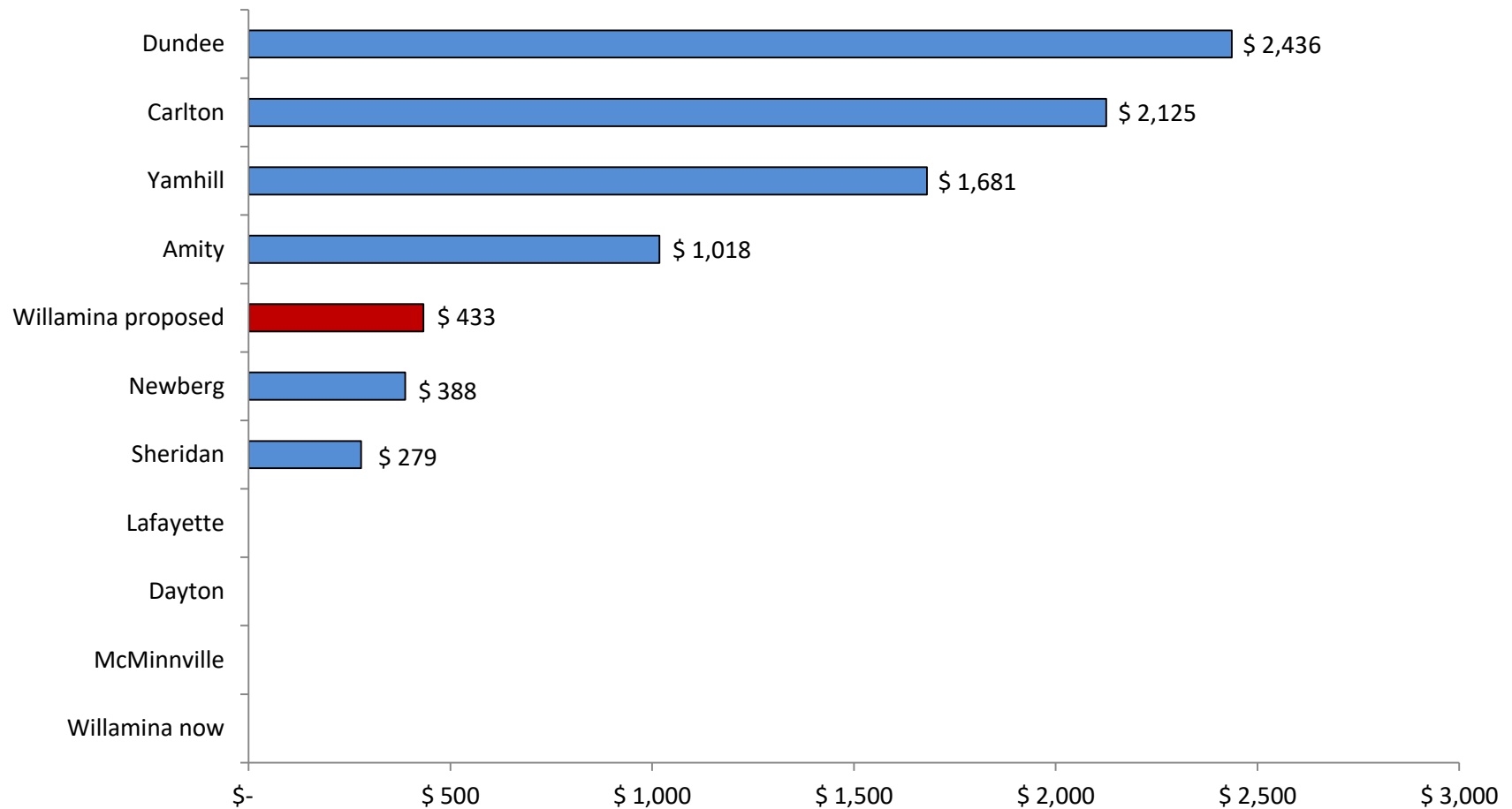
Table 19 - Proposed Stormwater SDCs per ESU and per Square Foot of Impervious Surface

Line Item Description	Per ESU	Per Sq. Foot of Impervious Surface
Proposed SDC components:		
Reimbursement fee	\$ -	\$ -
Improvement fee	412	0.1648
Administration fee at 5%	21	0.0082
Total proposed stormwater SDC	\$ 433	\$ 0.1730

Stormwater SDCs in Neighboring Communities

Shown below in Figures 4 is a chart that compares the current and proposed stormwater SDC for a single-family customer in Willamina to the same charge in similar communities in Yamhill County.

Figure 4 - Neighboring Communities' stormwater SDCs (Detached Single Family) July, 2021



Transportation SDCs

Transportation Capital Improvement Plan

The principal source of data for the transportation system CIP is the current 2020 Transportation System Plan (TSP) update in concert with the City's 2021 collector street CIP. At the time of this SDC study, the City's TSP is in the final stages of completion. This TSP update is funded from the proceeds of a Transportation Growth Management (TGM) grant. The TGM program is jointly managed by the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD). TGM is primarily funded by federal transportation funds, with additional funding provided by the State of Oregon. The primary categories of transportation system improvements are:

- Collector street improvements
- Pedestrian improvements
- Roadway improvements
- Bicycle improvements
- Bridge improvements
- Miscellaneous transportation improvements

With the assistance of City Staff, the project team has summarized the 2021 transportation system CIP for this SDC update. The 2021 transportation system CIP is shown in Table 20.

Table 20 - 2021 Transportation System CIP

		Funding Sources								
ID#	Item Description	June, 2021 Est.	City	SDCs	Urban Renewal	State/ODOT	Federal	LID or Utility	Developer	Total
Collector Street Improvements:										
S-3	SW Hill Dr	\$ 753,000	92.00%	8.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-4	SW Oak St	426,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-6	SW Walnut St	608,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-7	Spruce St	409,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-8a	NE Yamhill St (West Section)	548,000	85.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-8b	NE Yamhill ST (East Section)	506,000	85.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-9	2nd St	413,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-10a	NW 3rd St	507,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-10b	3rd St	212,000	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-11	Upper C St	339,000	20.00%	80.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-12	E St	624,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-13	NE 3rd St	1,099,000	85.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-14	SW Maple St	384,000	95.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
S-15	Oaken Hills Dr	829,000	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Subtotal street improvements		\$ 7,657,000	\$ 6,256,910	\$ 1,400,090	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,657,000
Pedestrian Improvements:										
P-33	OR 18/Main Street sidewalks	1,504,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-1	Pedestrian crossing Main st. to Adams st.	137,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-2	Pedestrian crossing Main st. to Lamson st.	202,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-33	Pedestrian crossing - Triangle West	94,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-4	Pedestrian crossing - Triangle East	332,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-5	Pedestrian crossing - Main st. / B	207,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-6	Pedestrian crossing Main st. / C	324,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-7	Pedestrian crossing 3rd st. / C	56,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-8	Pedestrian crossing Main st. / E	320,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-9	Pedestrian crossing 3rd st. / E	57,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-10	Pedestrian crossing Main st. / Oaken	838,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-11	Pedestrian crossing 4th st. / Oaken	74,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
P-12	Pedestrian crossing Solar / Oaken	51,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
Subtotal pedestrian improvements		\$ 4,196,000	\$ 699,333	\$ 2,797,333	\$ -	\$ -	\$ -	\$ -	\$ 699,333	\$ 4,196,000

Table 20 - 2021 Transportation System CIP Continued

		Funding Sources								
ID#	Item Description	June, 2021 Est.	City	SDCs	Urban Renewal	State/ODOT	Federal	LID or Utility	Developer	Total
Roadway Improvements:										
R-1	Roadway traffic calming Main st./ Adams st.	21,000	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
R-2	Roadway improvement - Triangle	568,000	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
R-3	Roadway - Main st. / Oaken st.	60,000	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
	Subtotal roadway improvements	\$ 649,000	\$ 97,350	\$ 551,650	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 649,000
Bicycle Improvements:										
B-1	City-wide bicycle improvements	213,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
B-2	Bicycle improvements - Yamhill	49,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
B-3	Bicycle improvements - Main st., E st., Oaken st.	646,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
B-4	Bicycle improvements - Oaken st.	134,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
B-5	Bicycle improvements - 1st st.	62,000	16.67%	66.67%	0.00%	0.00%	0.00%	0.00%	16.67%	100%
	Subtotal bicycle improvements	\$ 1,104,000	\$ 184,000	\$ 736,000	\$ -	\$ -	\$ -	\$ -	\$ 184,000	\$ 1,104,000
Bridge Improvements:										
BR-1	Bridge - pre-fab pedestrian bridge	566,000	16.67%	33.33%	0.00%	33.33%	0.00%	0.00%	16.67%	100%
BR-2	Bridge - cantilever rail bridge	778,000	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	50.00%	100%
	Subtotal bridge improvements	\$ 1,344,000	\$ 94,333	\$ 188,667	\$ -	\$ 188,667	\$ 389,000	\$ -	\$ 483,333	\$ 1,344,000
Miscellaneous transportation Improvements:										
	Miscellaneous - mini mobility hub	140,000	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
	Subtotal miscellaneous	\$ 140,000	\$ 21,000	\$ 119,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,000
Transportation System Total - Dollars		\$ 15,090,000	\$ 7,352,927	\$ 5,792,740	\$ -	\$ 188,667	\$ 389,000	\$ -	\$ 1,366,667	\$ 15,090,000
Transportation System Total - Percent			49%	38%	0%	1%	3%	0%	9%	100%

Transportation System Current and Future Demand

Existing Transportation Demand

Demand for transportation facilities is measured in PM peak-hour vehicle trips (PMPHVTs). One PMPHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. As part of the 2020 TSP planning effort, the City's consulting transportation engineers measured actual trip counts at four (4) key intersections throughout the City to estimate the current PMPHVTs for the City. Based on the observed data on October 29, 2020 the TSP team estimate the transportation system was serving 2,832 PMPHVTs. The intersections that were studied and the trip direction and movement totals are shown below in Table 21.

Table 21 - 2020 TSP Observed Trip Counts on October 29, 2020

City of Willamina 2020 Existing Conditions PM Peak Hour Vehicle Trips ¹							Direction	TSP
No.	2021 TSP Study Intersection	East	West	North	South		Totals	Checksum
1	NE Main Street & NE Oaken Hills Drive:							759
	Left	50			51		101	
	Right		51		59		110	
	Through	272	276				548	
2	NE C Street & NE Main Street:							712
	Left	5	2	5	16		28	
	Right	7	10	3	21		41	
	Through	310	332	1	-		643	
3	S Main Street & NE Main Street"							768
	Left	109		40			149	
	Right	65			96		161	
	Through			208	250		458	
4	S Main Street & SW Barbe Avenue/SE Barber Avenue							593
	Left	46	1	23	1		71	
	Right	23	-	5	63		91	
	Through	-	-	191	240		431	
	Movement Totals	887	672	476	797	2,832	2,832	2,832

¹ Source: City of Willamina Draft 2021 Transportation System Plan; Technical Memorandum; DKS Engineers; December 23, 2020; Observed Trip Counts on October 29, 2020

As discussed earlier in this report, an industry standard for allocating demands on a transportation system is to proportion the costs based on the relative number of trips created by a development. Trip rates are published by the Institute of Transportation Engineers (ITE) for various land uses. This SDC Update adopts the use of PMPHVTs as contained in the current ITE Trip Generation Manual, 10th Edition, as the basis for the trip generation standards. In addition, this update incorporates the number of shared trips and pass-by trips. This factor is an estimate of how many of the trips specific to the subject land use are linked to other destinations, where the actual trip is shared by multiple destinations or multiple stops on the same trip.

Forecasted Transportation Demand

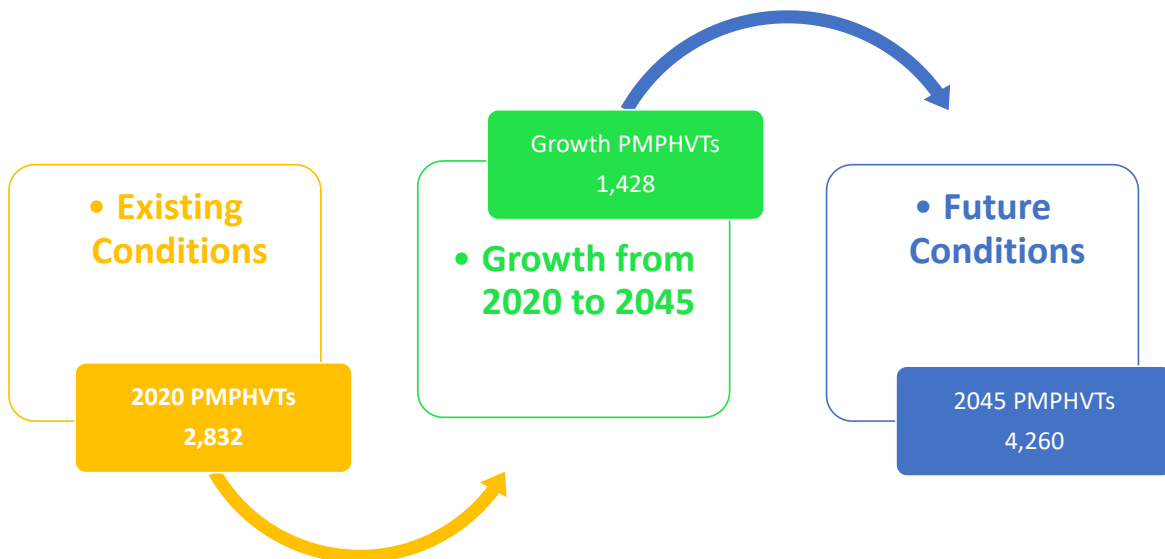
The TSP engineering team estimate the City's transportation system will serve 4,260 PMPHVTs by 2045. These estimates imply growth of 1,428 PMPHVTs from 2020 (observed counts) to 2045. The TSP future demand forecast is shown below in Table 22 and in graphical form in Figure 5.

Table 22 – Forecasted Future Transportation System Demand Expressed in PMPHVTs

City of Willamina 2045 Future Conditions PM Peak Hour Vehicle Trips ¹						Direction	TSP
No.	2021 TSP Study Intersection	East	West	North	South	Totals	Checksum
1	NE Main Street & NE Oaken Hills Drive:						1,140
	Left	75			75	150	
	Right		75		90	165	
	Through	410	415			825	
2	NE C Street & NE Main Street:						1,070
	Left	5	5	5	25	40	
	Right	10	15	5	30	60	
	Through	465	500	5	-	970	
3	S Main Street & NE Main Street"						1,155
	Left	165		60		225	
	Right	100			145	245	
	Through			310	375	685	
4	S Main Street & SW Barbe Avenue/SE Barber Avenue						895
	Left	70	5	35	5	115	
	Right	35	-	5	95	135	
	Through	-	-	285	360	645	
Movement Totals		1,335	1,015	710	1,200	4,260	4,260

¹ Source: City of Willamina Draft 2021 Transportation System Plan; Technical Memorandum; DKS Engineers; December 23, 2020

Figure 5 - Existing and Future Transportation System Demand Expressed in PMPHVTs



Reimbursement Fee Calculations

The transportation reimbursement fee methodology mirrors that used for the water reimbursement fee. The methodological steps in its construction are restated here.

- Step 1: Calculate the original cost of transportation fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of transportation fixed assets**.
- Step 2: Subtract from the adjusted original cost of transportation fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of transportation fixed assets in service**.
- Step 3: Subtract from the modified book value of transportation assets in service any grant funding or contributed capital. This arrives at the **modified book value of transportation fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of transportation fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives at a **gross transportation reimbursement fee basis**.
- Step 5: Subtract from the gross transportation reimbursement fee basis the fund balance held in the Transportation Reimbursement SDC fund (if available). This arrives at the **net transportation reimbursement fee basis**.
- Step 6: Divide the net transportation reimbursement fee basis by the sum of existing and future ELNDTs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total transportation reimbursement fee is shown below in Table 23.

Table 23 - Calculation of the Transportation Reimbursement Fee

Line Item Description	Amount
Original Cost of transportation infrastructure ¹	
1420 Land Improvements	\$ 522,623
1430 Buildings	70,711
1440 Equipment	22,657
1460 Vehicles	<u>eliminated</u>
Subtotal original cost	615,991
Accumulated Depreciation ¹	
1420 Land Improvements	270,168
1430 Buildings	21,796
1440 Equipment	22,228
1460 Vehicles	<u>eliminated</u>
Subtotal accumulated depreciation	314,192
 Book value of transportation infrastructure	 \$ 301,799
 Gross reimbursement cost basis	 \$ 301,799
Eliminating entries:	
Street reimbursement SDC fund balance	-
Principal outstanding on bonds, notes, and loans payable	-
Grants, net of amortization	-
Developer contributions	<u>-</u>
Subtotal eliminating entries	-
 Net reimbursement cost basis	 \$ 301,799
 Estimated existing and future PMPHVTs at 2045	 4,260
 Transportation reimbursement fee per PMPHVT	 \$ 71

¹ Source: Willamina Accounting Summary Report - Capitalized Assets as of June 30, 2020

Improvement Fee Calculations

The calculation of the transportation improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the transportation infrastructure. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Transportation Improvement SDC Fund. This arrives at **the net transportation improvement fee basis**.
- Step 3: Divide the net transportation improvement fee basis by the forecasted number of growth PM PHVTs over the planning period. This arrives at **the total transportation improvement fee**.

The actual data that was used to calculate the total transportation improvement fee is shown below in Table 24.

Table 24 - Calculation of the Transportation Improvement Fee

Pjt. #	Project Description	Total Project Costs	SDC Ineligible Costs	SDC Eligible Costs
Collector Street Improvements:				
S-3	SW Hill Dr	753,000	692,760	60,240
S-4	SW Oak St	426,000	426,000	-
S-6	SW Walnut St	608,000	608,000	-
S-7	Spruce St	409,000	409,000	-
S-8a	NE Yamhill St (West Section)	548,000	465,800	82,200
S-8b	NE Yamhill ST (East Section)	506,000	430,100	75,900
S-9	2nd St	413,000	413,000	-
S-10a	NW 3rd St	507,000	507,000	-
S-10b	3rd St	212,000	212,000	-
S-11	Upper C St	339,000	67,800	271,200
S-12	E St	624,000	312,000	312,000
S-13	NE 3rd St	1,099,000	934,150	164,850
S-14	SW Maple St	384,000	364,800	19,200
S-15	Oaken Hills Dr	829,000	414,500	414,500
Pedestrian Improvements:				
P-33	OR 18/Main Street sidewalks	1,504,000	501,333	1,002,667
P-1	Pedestrian crossing Main st. to Adams st.	137,000	45,667	91,333
P-2	Pedestrian crossing Main st. to Lamson st.	202,000	67,333	134,667
P-33	Pedestrian crossing - Triangle West	94,000	31,333	62,667
P-4	Pedestrian crossing - Triangle East	332,000	110,667	221,333
P-5	Pedestrian crossing - Main st. / B	207,000	69,000	138,000
P-6	Pedestrian crossing Main st. / C	324,000	108,000	216,000
P-7	Pedestrian crossing 3rd st. / C	56,000	18,667	37,333
P-8	Pedestrian crossing Main st. / E	320,000	106,667	213,333
P-9	Pedestrian crossing 3rd st. / E	57,000	19,000	38,000
P-10	Pedestrian crossing Main st. / Oaken	838,000	279,333	558,667
P-11	Pedestrian crossing 4th st. / Oaken	74,000	24,667	49,333
P-12	Pedestrian crossing Solar / Oaken	51,000	17,000	34,000
Roadway Improvements:				
R-1	Roadway traffic calming Main st./ Adams st.	21,000	3,150	17,850
R-2	Roadway improvement - Triangle	568,000	85,200	482,800
R-3	Roadway - Main st. / Oaken st.	60,000	9,000	51,000
Bicycle Improvements:				
B-1	City-wide bicycle improvements	213,000	71,000	142,000
B-2	Bicycle improvements - Yamhill	49,000	16,333	32,667
B-3	Bicycle improvements - Main st., E st., Oaken st.	646,000	215,333	430,667
B-4	Bicycle improvements - Oaken st.	134,000	44,667	89,333
B-5	Bicycle improvements - 1st st.	62,000	20,667	41,333
Bridge Improvements:				
BR-1	Bridge - pre-fab pedestrian bridge	566,000	377,333	188,667
BR-2	Bridge - cantilever rail bridge	778,000	778,000	-
Miscellaneous transportation Improvements:				
	Miscellaneous - mini mobility hub	140,000	21,000	119,000
Transportation System Totals		<u>\$ 15,090,000</u>	<u>\$ 9,297,260</u>	<u>\$ 5,792,740</u>
Total Improvement Fee Eligible Costs for Future System Improvements				5,792,740
less: Transportation SDC Fund balance as of June 30, 2020				<u>204,000</u>
Adjusted Improvement Fee Eligible Costs for Future System Improvements				5,588,740
Estimated PMPHVTs added over 25 years				1,428
Transportation improvement fee per PMPHVT				<u>\$ 3,914</u>

Transportation SDC Model Summary

The 2021 transportation SDC update was done in accordance with Willamina Municipal Code Chapter 33, and with the benefit of adopted capital improvement plans and plan updates for transportation services. The proposed transportation SDCs per PMPHVT is shown below in Table 25.

Table 25 - Proposed Transportation SDCs per PMPHVT

Reimbursement fee	\$	71
Improvement fee		3,914
Administration fee @ 5%		<u>199</u>
Total transportation SDC	\$	4,184

To charge the appropriate SDC, the City must estimate how many PMPHVTs will be generated by the development in question. That number can then be multiplied by \$4,184 to determine the amount of SDC owed by new development projects.

The number of PMPHVTs that a property will generate is a function of the increase in scope and scale of activities that will occur on that property. By “scope of activities,” we mean land use. For example, a new single-family residence will generate trip-ends differently from a new retail store of the same size. By “scale of activities,” we mean some measure of quantity. For residential land uses, the number of dwelling units is an appropriate measure of scale. For many commercial and industrial land uses, building floor area is the best measure. For example, a 20,000-square-foot store is likely to generate twice the number of trip-ends as a 10,000-square-foot store of the same type. Table 26 presents proposed transportation SDCs per unit of scale for land uses in the 9th edition of Trip Generation Manual, published by the Institute of Transportation Engineers (ITE):

Table 26 - Proposed Transportation SDCs by ITE Code

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment						
Port and Terminal (Land Uses 000-099)											
010	Waterport/Marine Terminal*	17.15	0.00%	0.00%	-	17.15	67,133	1,218	3,418	71,768	Berth
021	Commercial Airport	5.75	0.00%	0.00%	-	5.75	22,506	408	1,146	24,059	Average flights per day
022	General Aviation Airport	1.57	0.00%	0.00%	-	1.57	6,145	111	313	6,569	Employee
030	Intermodal Truck Terminal	1.87	0.00%	0.00%	-	1.87	7,319	133	373	7,825	1,000 square feet of gross floor area
090	Park-an-Ride Lot with Bus Service	0.43	0.00%	0.00%	-	0.43	1,683	31	86	1,799	Parking space
093	Light Rail Transit Station with Parking	1.24	0.00%	0.00%	-	1.24	4,853	88	247	5,188	Parking space
Industrial (Land Uses 100-199)											
110	General light industrial	0.63	0.00%	0.00%	-	0.63	2,466	45	126	2,636	1,000 square feet of gross floor area
120	General heavy industrial	0.68	0.00%	0.00%	-	0.68	2,662	48	135	2,845	1,000 square feet of gross floor area
130	Industrial park	0.40	0.00%	0.00%	-	0.40	1,566	28	80	1,674	1,000 square feet of gross floor area
140	Manufacturing	0.67	0.00%	0.00%	-	0.67	2,622	48	133	2,803	1,000 square feet of gross floor area
150	Warehousing	0.19	0.00%	0.00%	-	0.19	744	13	38	795	1,000 square feet of gross floor area
151	Mini-warehouse	0.17	0.00%	0.00%	-	0.17	665	12	34	711	1,000 square feet of gross floor area
154	High-Cube transload & short-term warehouse	0.10	0.00%	0.00%	-	0.10	391	7	20	418	1,000 square feet of gross floor area
155	High-Cube fulfillment center warehouse	1.37	0.00%	0.00%	-	1.37	5,362	97	273	5,732	1,000 square feet of gross floor area
156	High-Cube Parcel hub warehouse	0.64	0.00%	0.00%	-	0.64	2,505	45	128	2,678	1,000 square feet of gross floor area
157	High-Cube cold storage warehouse	0.12	0.00%	0.00%	-	0.12	470	9	24	502	1,000 square feet of gross floor area
160	Data center	0.09	0.00%	0.00%	-	0.09	352	6	18	377	1,000 square feet of gross floor area
170	Utilities	2.27	0.00%	0.00%	-	2.27	8,885	161	452	9,498	1,000 square feet of gross floor area
180	Specialty trade contractor	1.97	0.00%	0.00%	-	1.97	7,711	140	393	8,243	1,000 square feet of gross floor area
Residential (Land Uses 200-299)											
210	Single family detached housing	0.99	0.00%	0.00%	-	0.99	3,875	70	197	4,142	Dwelling unit
220	Apartment	0.56	0.00%	0.00%	-	0.56	2,192	40	112	2,343	Dwelling unit
221	Low-Rise Apartment	0.44	0.00%	0.00%	-	0.44	1,722	31	88	1,841	Dwelling unit
222	High-Rise Apartment	0.36	0.00%	0.00%	-	0.36	1,409	26	72	1,506	Dwelling unit
225	Off-Campus studen apartment	0.25	0.00%	0.00%	-	0.25	979	18	50	1,046	Dwelling unit
231	Mid-Rise residential w/1st-floor commercial	0.36	0.00%	0.00%	-	0.36	1,409	26	72	1,506	Dwelling unit
232	High-Rise Residential w/1st-floor commercial	0.21	0.00%	0.00%	-	0.21	822	15	42	879	Dwelling unit
240	Mobile home park	0.46	0.00%	0.00%	-	0.46	1,800	33	92	1,925	Dwelling unit
251	Senior Adult Housing - Detached	0.30	0.00%	0.00%	-	0.30	1,174	21	60	1,255	Dwelling unit
252	Senior Adult Housing - Attached	0.26	0.00%	0.00%	-	0.26	1,018	18	52	1,088	Dwelling unit
253	Congregate Care Facility	0.18	0.00%	0.00%	-	0.18	705	13	36	753	Dwelling unit
254	Assisted living	0.26	0.00%	0.00%	-	0.26	1,018	18	52	1,088	Bed
255	Continuing Care Retirement Community	0.16	0.00%	0.00%	-	0.16	626	11	32	669	Unit
260	Recreational Homes	0.28	0.00%	0.00%	-	0.28	1,096	20	56	1,172	Dwelling unit
265	Timeshare	0.63	0.00%	0.00%	-	0.63	2,466	45	126	2,636	Dwelling unit
270	Residential Planned Unit Development	0.69	0.00%	0.00%	-	0.69	2,701	49	137	2,887	Dwelling unit

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code		Land Use	Total Trip Ends	Diverted/Linked Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					Pass-by Trips	and pass-by Trip Adjustment						
Lodging (Land Uses 300-399)												
310	Hotel		0.60	0.00%	0.00%	-	0.60	2,348	43	120	2,511	Room
311	All Suites Hotel		0.36	0.00%	0.00%	-	0.36	1,409	26	72	1,506	Room
312	Business Hotel		0.32	0.00%	0.00%	-	0.32	1,252	23	64	1,339	Occupied Room
320	Motel		0.38	0.00%	0.00%	-	0.38	1,487	27	76	1,590	Room
330	Resort Hotel		0.41	0.00%	0.00%	-	0.41	1,605	29	82	1,716	Room
Recreational (Land Uses 400-499)												
411	Public park		0.11	0.00%	0.00%	-	0.11	431	8	22	460	Acre
416	Campground/Recreational Vehicle Park		0.98	0.00%	0.00%	-	0.98	3,836	70	195	4,101	Acre
420	Marina		0.21	0.00%	0.00%	-	0.21	822	15	42	879	Berth
430	Golf course		2.91	0.00%	0.00%	-	2.91	11,390	207	580	12,176	Hole
431	Miniature Golf Course		0.33	0.00%	0.00%	-	0.33	1,292	23	66	1,381	Hole
432	Golf Driving Range		1.25	0.00%	0.00%	-	1.25	4,893	89	249	5,230	Tees/Driving Position
433	Batting Cages		2.22	0.00%	0.00%	-	2.22	8,689	158	442	9,289	Cage
434	Rock climbing gym		1.64	0.00%	0.00%	-	1.64	6,419	116	327	6,862	1,000 square feet of gross floor area
435	Multipurpose Recreational Facility		3.58	0.00%	0.00%	-	3.58	14,012	254	713	14,980	1,000 square feet of gross floor area
436	Trampoline park		1.50	0.00%	0.00%	-	1.50	5,871	107	299	6,276	1,000 square feet of gross floor area
437	Bowling Alley		1.30	0.00%	0.00%	-	1.30	5,088	92	259	5,440	Bowling lane
440	Adult Cabaret		2.93	0.00%	0.00%	-	2.93	11,468	208	584	12,260	1,000 square feet of gross floor area
444	Movie Theater with Matinee - Friday pm peak hou		6.17	0.00%	0.00%	-	6.17	24,149	438	1,229	25,817	1,000 square feet of gross floor area
445	Multiplex Movie Theater - Friday pm peak hour		4.91	0.00%	0.00%	-	4.91	19,218	349	978	20,545	1,000 square feet of gross floor area
452	Horse Racetrack		0.06	0.00%	0.00%	-	0.06	235	4	12	251	Seat
453	Automobile Racetrack - Saturday peak hour		0.28	0.00%	0.00%	-	0.28	1,096	20	56	1,172	Attendee
454	Dog Racetrack		0.15	0.00%	0.00%	-	0.15	587	11	30	628	Attendee
460	Arena*		0.47	0.00%	0.00%	-	0.47	1,840	33	94	1,967	1,000 square feet of gross floor area
462	Professional baseball stadium		0.15	0.00%	0.00%	-	0.15	587	11	30	628	Attendee
465	Ice Skating Rink		1.33	0.00%	0.00%	-	1.33	5,206	94	265	5,565	1,000 square feet of gross floor area
466	Snow Ski Area		26.00	0.00%	0.00%	-	26.00	101,764	1,846	5,181	108,791	Slopes
470	Bingo hall		0.82	0.00%	0.00%	-	0.82	3,209	58	163	3,431	Attendee
473	Casino/Video Lottery Establishment		13.49	0.00%	0.00%	-	13.49	52,800	958	2,688	56,446	1,000 square feet of gross floor area
480	Amusement Park		3.95	0.00%	0.00%	-	3.95	15,460	280	787	16,528	Acre
482	Water slide park Saturday peak hour generator		22.92	0.00%	0.00%	-	22.92	89,709	1,627	4,567	95,903	Acre
488	Soccer Complex		16.43	0.00%	0.00%	-	16.43	64,307	1,167	3,274	68,747	Field
490	Tennis Courts		4.21	0.00%	0.00%	-	4.21	16,478	299	839	17,616	Court
491	Racquet/Tennis Club		3.82	0.00%	0.00%	-	3.82	14,951	271	761	15,984	Court
492	Health/Fitness Club		3.45	0.00%	0.00%	-	3.45	13,503	245	687	14,436	1,000 square feet of gross floor area
493	Athletic Club		6.29	0.00%	0.00%	-	6.29	24,619	447	1,253	26,319	1,000 square feet of gross floor area
495	Recreational Community Center		2.31	0.00%	0.00%	-	2.31	9,041	164	460	9,666	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment						
Institutional (Land Uses 500-599)											
501	Military Base	0.39	0.00%	0.00%	-	0.39	1,526	28	78	1,632	Employee
520	Elementary School	1.37	0.00%	0.00%	-	1.37	5,362	97	273	5,732	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	0.00%	0.00%	-	1.19	4,658	84	237	4,979	1,000 square feet of gross floor area
530	High School	0.97	0.00%	0.00%	-	0.97	3,797	69	193	4,059	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	0.00%	0.00%	-	6.53	25,558	464	1,301	27,323	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	0.00%	0.00%	-	5.50	21,527	391	1,096	23,013	1,000 square feet of gross floor area
537	Charter elementary school	4.96	0.00%	0.00%	-	4.96	19,413	352	988	20,754	1,000 square feet of gross floor area
537	School district office	2.04	0.00%	0.00%	-	2.04	7,985	145	406	8,536	1,000 square feet of gross floor area
540	Junior/Community College	1.86	0.00%	0.00%	-	1.86	7,280	132	371	7,783	1,000 square feet of gross floor area
550	University/College	1.17	0.00%	0.00%	-	1.17	4,579	83	233	4,896	1,000 square feet of gross floor area
560	Church	0.49	0.00%	0.00%	-	0.49	1,918	35	98	2,050	1,000 square feet of gross floor area
561	Synagogue - Friday	2.92	0.00%	0.00%	-	2.92	11,429	207	582	12,218	1,000 square feet of gross floor area
562	Mosque - Friday	4.22	0.00%	0.00%	-	4.22	16,517	300	841	17,658	1,000 square feet of gross floor area
565	Day Care Center	11.12	56.00%	0.00%	6.23	4.89	19,150	347	975	20,473	1,000 square feet of gross floor area
566	Cemetery	0.46	0.00%	0.00%	-	0.46	1,800	33	92	1,925	Acres
571	Prison	2.91	0.00%	0.00%	-	2.91	11,390	207	580	12,176	1,000 square feet of gross floor area
575	Fire and rescue station	0.48	0.00%	0.00%	-	0.48	1,879	34	96	2,008	1,000 square feet of gross floor area
580	Museum	0.18	0.00%	0.00%	-	0.18	705	13	36	753	1,000 square feet of gross floor area
590	Library	8.16	0.00%	0.00%	-	8.16	31,938	579	1,626	34,143	1,000 square feet of gross floor area
Medical (Land Uses 600-699)											
610	Hospital	0.97	0.00%	0.00%	-	0.97	3,797	69	193	4,059	1,000 square feet of gross floor area
620	Nursing Home	0.59	0.00%	0.00%	-	0.59	2,309	42	118	2,469	1,000 square feet of gross floor area
630	Clinic	3.28	0.00%	0.00%	-	3.28	12,838	233	654	13,724	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	3.53	0.00%	0.00%	-	3.53	13,816	251	703	14,770	1,000 square feet of gross floor area
650	Free-Standing emergency room	1.52	0.00%	0.00%	-	1.52	5,949	108	303	6,360	1,000 square feet of gross floor area
Office (Land Uses 700-799)											
710	General office building	1.15	0.00%	0.00%	-	1.15	4,501	82	229	4,812	1,000 square feet of gross floor area
712	Small office building	2.45	0.00%	0.00%	-	2.45	9,589	174	488	10,251	1,000 square feet of gross floor area
714	Corporate Headquarters Building	0.60	0.00%	0.00%	-	0.60	2,348	43	120	2,511	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.71	0.00%	0.00%	-	1.71	6,693	121	341	7,155	1,000 square feet of gross floor area
720	Medical-dental office building	3.46	0.00%	0.00%	-	3.46	13,542	246	689	14,478	1,000 square feet of gross floor area
730	Government Office Building	1.71	0.00%	0.00%	-	1.71	6,693	121	341	7,155	1,000 square feet of gross floor area
731	State Motor Vehicles Department	5.20	0.00%	0.00%	-	5.20	20,353	369	1,036	21,758	1,000 square feet of gross floor area
732	United States Post Office	11.21	0.00%	0.00%	-	11.21	43,876	796	2,234	46,905	1,000 square feet of gross floor area
733	Government Office Complex	2.82	0.00%	0.00%	-	2.82	11,037	200	562	11,800	1,000 square feet of gross floor area
750	Office park	1.07	0.00%	0.00%	-	1.07	4,188	76	213	4,477	1,000 square feet of gross floor area
760	Research and development center	0.49	0.00%	0.00%	-	0.49	1,918	35	98	2,050	1,000 square feet of gross floor area
770	Business park	0.42	0.00%	0.00%	-	0.42	1,644	30	84	1,757	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment						
Retail (Land Uses 800-899)											
810	Tractor Supply Store	1.40	0.00%	0.00%	-	1.40	5,480	99	279	5,858	1,000 square feet of gross floor area
811	Construction Equipment Rental Store	0.99	0.00%	0.00%	-	0.99	3,875	70	197	4,142	1,000 square feet of gross floor area
812	Building Materials and Lumber Store	2.06	0.00%	0.00%	-	2.06	8,063	146	410	8,620	1,000 square feet of gross floor area
813	Free Standing Discount Super Store	4.33	0.00%	29.00%	1.26	3.07	12,033	218	613	12,864	1,000 square feet of gross floor area
814	Variety Stoe	6.84	0.00%	34.00%	2.33	4.51	17,669	321	899	18,889	1,000 square feet of gross floor area
815	Free Standing Discount Store	4.83	35.25%	17.00%	2.52	2.31	9,027	164	460	9,650	1,000 square feet of gross floor area
816	Hardware/Paint Store	2.68	29.50%	26.00%	1.49	1.19	4,668	85	238	4,990	1,000 square feet of gross floor area
817	Nursery (Garden Center)	6.94	0.00%	0.00%	-	6.94	27,163	493	1,383	29,039	1,000 square feet of gross floor area
818	Nursery (Wholesale)	5.18	0.00%	0.00%	-	5.18	20,275	368	1,032	21,674	1,000 square feet of gross floor area
820	Shopping Center	3.81	15.86%	34.00%	1.90	1.91	7,477	136	381	7,993	1,000 square feet of gross leasable area
823	Factory Outlet Center	2.29	0.00%	0.00%	-	2.29	8,963	163	456	9,582	1,000 square feet of gross floor area
840	Automobile Sales (New)	2.43	0.00%	0.00%	-	2.43	9,511	173	484	10,168	1,000 square feet of gross floor area
841	Automobile Sales (Used)	3.75	0.00%	0.00%	-	3.75	14,678	266	747	15,691	1,000 square feet of gross floor area
842	Recreational Vehicle Sales	0.77	0.00%	0.00%	-	0.77	3,014	55	153	3,222	1,000 square feet of gross floor area
843	Automobile Parts Sales	4.91	13.00%	43.00%	2.75	2.16	8,456	153	430	9,040	1,000 square feet of gross floor area
848	Tire Store	3.98	3.33%	28.00%	1.25	2.73	10,697	194	545	11,435	1,000 square feet of gross floor area
849	Tire Superstore	2.11	0.00%	0.00%	-	2.11	8,259	150	420	8,829	1,000 square feet of gross floor area
850	Supermarket	9.24	25.25%	36.00%	5.66	3.58	14,014	254	713	14,982	1,000 square feet of gross floor area
851	Convenience Market	49.11	6.47%	51.00%	28.23	20.88	81,743	1,483	4,161	87,387	1,000 square feet of gross floor area
853	Convenience Market with Gasoline Pumps	49.29	17.80%	66.00%	41.31	7.98	31,253	567	1,591	33,411	1,000 square feet of gross floor area
854	Discount Supermarket	8.38	23.20%	21.00%	3.70	4.68	18,302	332	932	19,566	1,000 square feet of gross floor area
857	Discount Club	4.18	0.00%	37.00%	1.55	2.63	10,307	187	525	11,019	1,000 square feet of gross floor area
858	Farmers market - weekday pm peak hour	179.84	0.00%	0.00%	-	179.84	703,894	12,769	35,833	752,496	Acres
860	Wholesale Market	1.76	0.00%	0.00%	-	1.76	6,889	125	351	7,364	1,000 square feet of gross floor area
861	Sporting Goods Superstore	2.02	0.00%	0.00%	-	2.02	7,906	143	402	8,452	1,000 square feet of gross floor area
862	Home Improvement Superstore	2.33	6.00%	42.00%	1.12	1.21	4,742	86	241	5,070	1,000 square feet of gross floor area
863	Electronics Superstore	4.26	33.00%	40.00%	3.11	1.15	4,502	82	229	4,813	1,000 square feet of gross floor area
864	Toy/Children's Superstore	5.00	0.00%	0.00%	-	5.00	19,570	355	996	20,921	1,000 square feet of gross floor area
865	Baby Superstore	1.82	0.00%	0.00%	-	1.82	7,123	129	363	7,615	1,000 square feet of gross floor area
866	Pet Supply Superstore	3.55	0.00%	0.00%	-	3.55	13,895	252	707	14,854	1,000 square feet of gross floor area
867	Office Supply Superstore	2.77	0.00%	0.00%	-	2.77	10,842	197	552	11,590	1,000 square feet of gross floor area
868	Book Superstore	15.83	0.00%	0.00%	-	15.83	61,959	1,124	3,154	66,237	1,000 square feet of gross floor area
869	Discount Home Furnishing Superstore	1.57	0.00%	0.00%	-	1.57	6,145	111	313	6,569	1,000 square feet of gross floor area
872	Bed and Linen Superstore	2.22	0.00%	0.00%	-	2.22	8,689	158	442	9,289	1,000 square feet of gross floor area
875	Department Store	1.95	0.00%	0.00%	-	1.95	7,632	138	389	8,159	1,000 square feet of gross floor area
876	Apparel Store	4.12	0.00%	0.00%	-	4.12	16,126	293	821	17,239	1,000 square feet of gross floor area
879	Arts and Crafts Store	6.21	0.00%	0.00%	-	6.21	24,306	441	1,237	25,984	1,000 square feet of gross floor area
880	Pharmacy/Drugstore without Drive-Through	8.51	4.67%	53.00%	4.91	3.60	14,100	256	718	15,074	1,000 square feet of gross floor area
881	Pharmacy/Drugstore with Drive-Through	10.29	13.00%	49.00%	6.38	3.91	15,305	278	779	16,361	1,000 square feet of gross floor area
882	Marijuana Dispensary	21.83	0.00%	0.00%	-	21.83	85,443	1,550	4,350	91,342	1,000 square feet of gross floor area
890	Furniture Store	0.52	10.33%	53.00%	0.33	0.19	746	14	38	798	1,000 square feet of gross floor area
895	Beverage container recycling depot -PM peak hr	10.10	0.00%	0.00%	-	10.10	39,531	717	2,012	42,261	1,000 square feet of gross floor area
897	Medical Equipment Store	1.24	0.00%	0.00%	-	1.24	4,853	88	247	5,188	1,000 square feet of gross floor area
899	Liquor store	16.37	0.00%	0.00%	-	16.37	64,072	1,162	3,262	68,496	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment						
Services (Land Uses 900-999)											
911	Walk-in Bank	12.13	0.00%	0.00%	-	12.13	47,477	861	2,417	50,755	1,000 square feet of gross floor area
912	Drive-in Bank	20.45	9.24%	35.00%	9.05	11.40	44,633	810	2,272	47,714	1,000 square feet of gross floor area
918	Hair Salon	1.45	0.00%	0.00%	-	1.45	5,675	103	289	6,067	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.42	0.00%	0.00%	-	7.42	29,042	527	1,478	31,047	1,000 square feet of gross floor area
925	Drinking Place	11.36	0.00%	0.00%	-	11.36	44,463	807	2,263	47,533	1,000 square feet of gross floor area
926	Food Cart Pod	3.08	0.00%	0.00%	-	3.08	12,055	219	614	12,887	Food Cart
930	Fast Casual Restaurant	14.13	0.00%	0.00%	-	14.13	55,305	1,003	2,815	59,123	1,000 square feet of gross floor area
931	Quality Restaurant	7.80	13.50%	44.00%	4.49	3.32	12,975	235	661	13,871	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	9.77	17.25%	43.00%	5.89	3.88	15,200	276	774	16,250	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	28.34	17.25%	43.00%	17.07	11.27	44,092	800	2,245	47,136	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	32.67	9.06%	50.00%	19.29	13.38	52,356	950	2,665	55,971	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no inc	42.65	0.00%	89.00%	37.96	4.69	18,363	333	935	19,630	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	36.31	17.25%	43.00%	21.88	14.43	56,492	1,025	2,876	60,392	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	43.38	0.00%	89.00%	38.61	4.77	18,677	339	951	19,966	1,000 square feet of gross floor area
938	Coffee/donut kiosk	83.33	0.00%	89.00%	74.16	9.17	35,877	651	1,826	38,354	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through M	28.00	0.00%	0.00%	-	28.00	109,592	1,988	5,579	117,159	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Winc	19.02	0.00%	0.00%	-	19.02	74,444	1,350	3,790	79,584	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	8.70	0.00%	0.00%	-	8.70	34,052	618	1,733	36,403	Servicing Position
942	Automobile Care Center	3.11	0.00%	0.00%	-	3.11	12,173	221	620	13,013	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	2.26	0.00%	0.00%	-	2.26	8,846	160	450	9,456	1,000 square feet of gross floor area
944	Gasoline/service station	109.27	23.00%	42.00%	71.03	38.24	149,689	2,715	7,620	160,025	1,000 square feet of gross floor area
945	Gasoline/service station with convenience market	88.35	31.22%	56.00%	77.06	11.29	44,186	802	2,249	47,237	1,000 square feet of gross floor area
947	Self-Service Car Wash	5.54	0.00%	0.00%	-	5.54	21,684	393	1,104	23,181	Wash stall
948	Automated Car Wash	13.60	0.00%	0.00%	-	13.60	53,230	966	2,710	56,906	Wash stall
949	Car Wash and Detail Center	14.20	0.00%	0.00%	-	14.20	55,579	1,008	2,829	59,416	1,000 square feet of gross floor area
950	Truck Stop	22.73	0.00%	0.00%	-	22.73	88,965	1,614	4,529	95,108	1,000 square feet of gross floor area
960	Super Convenience Market/Gas Station	69.28	0.00%	0.00%	-	69.28	271,162	4,919	13,804	289,885	1,000 square feet of gross floor area
970	Winery	7.31	0.00%	0.00%	-	7.31	28,611	519	1,457	30,587	1,000 square feet of gross floor area

* No ITE PM peak hour trip generation for this code/category, the trip generation shown is ITE weekday average divided by ten.

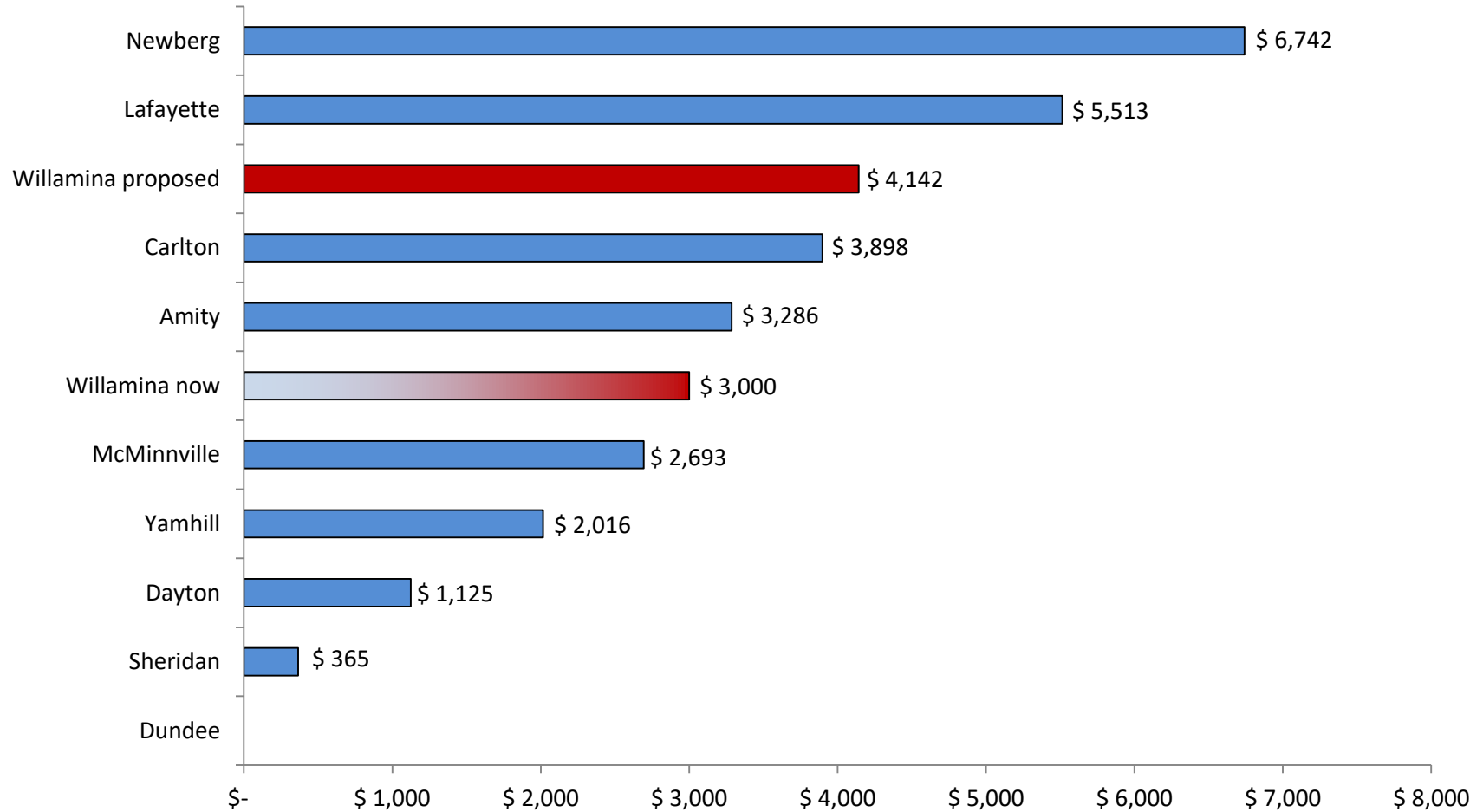
Source: ITE, Trip Generation Manual, 10th edition

PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

Transportation SDCs in Neighboring Communities

Shown below in Figures 6 is a chart that compares the current and proposed transportation SDC for a single-family customer in Willamina to the same charge in similar communities in Yamhill County.

Figure 6 - Neighboring Communities' transportation SDCs (Detached Single Family) July, 2021



Parks SDCs

The 2003 Parks Master Plan

In 2003, the City completed a parks master plan that established parks and recreation needs assessments through the year 2023. That needs assessment relied on levels of service (LOS) to determine the adequacy/needs for current and future parks and trails infrastructure. To determine adequacy, park and recreation providers typically measure existing parklands and facilities and compare them against established standards, typically LOS Standards. LOS standards are measures of the amount of public recreation parklands and facilities being provided to meet that jurisdiction's basic needs and expectations. For example, the amount of parkland currently needed in a particular jurisdiction may be determined by comparing the ratio of existing developed park acres per 1,000 residents (by all providers within the jurisdiction) to the jurisdiction's desired level of parks relative to population. The gap between the two ratios is the currently needed park acreage. As the population grows, the objective is to provide enough additional acreage to maintain the jurisdiction's desired ratio of park acres to 1,000 residents. These ratios can provide insight and act as tools to determine the amount of parkland or trails needed to meet current and future recreation needs.

The City does not currently charge a parks SDC on new development. For this parks SDC creation, the project team reviewed recommended parks and trails LOS (by parks classification) for the City based on the 2013-2017 Statewide Comprehensive Outdoor Recreation Plan (SCORP). The SCORP recommended Oregon LOS guidelines were developed after reviewing the National Recreation and Parks Association (NRPA) guidelines and the results from the 2014 statewide average guidelines survey. The recommended Plan LOS by parks category are shown below in Table 27.

Table 27 – Parks and Recreation LOS Standards for Willamina

Parkland Type	Average Planning LOS Guidelines in Oregon (Acres /1,000 population)	NRPA Standard LOS Guidelines (Acres /1,000 population)	Recommended Oregon LOS Guidelines (Acres /1,000 population)
Pocket Parks	0.16	0.25 to 0.5	0.25 to 0.5
Urban Plaza Parks	0.18	None	0.1 to 0.2
Neighborhood Parks	1.27	1.0 to 2.0	1.0 to 2.0
Community Parks	2.76	5.0 to 8.0	2.0 to 6.0
Regional Parks	8.99	5.0 to 10.0	5.0 to 10.0
Nature Parks	2.74	None	2.0 to 6.0
Special Use Parks	0.38	None	None
Totals	-	6.25 to 10.5 developed	6.25 to 12.5

A "trail" includes multi-use, pedestrian, and soft surface trails that accommodate a variety of activities such as walking, running, biking, dog walking, rollerblading, skateboarding, and horseback riding. Multi-use trails are designed for use by pedestrians, bicyclists, skateboarders, wheelchairs, and other non-motorized vehicle users. Such trails may be located within parks or along existing streets and roadways as part of the citywide transportation system. For trails, the statewide average planning LOS Guidelines are at 0.62 miles per 1,000 residents and the SCORP recommended LOS for Oregon is anywhere between

0.5 to 1.5 miles of trails per resident. For this park SDC study, we established a minimum trails LOS of 0.5 miles per 1,000 residents with both the current population and a population projection for 2040.

Having established the LOS standards for park lands and trails, the next step is to compare the City's current parks and trails inventory to the standard and analyze the surpluses/deficiencies by parks category. That data is shown below in Table 28.

Table 28 - Existing Parks and Trails LOS Surplus/Deficiency

Classification and Park Name	Acres Available		Linear Miles	Current Level of Service ¹	Recommended LOS ¹		LOS Surplus or (Deficiency)	% Capacity Remaining	
	Gross	Net			Low	High			
Pocket Parks:									
Triangle Park	0.03	0.03							
Garden Spot Park	<u>0.30</u>	<u>0.30</u>							
	0.33	0.33		0.136	0.250	0.500	(0.114)	Zero	✓
Neighborhood Parks:									
Tina Miller Memorial Park	0.35	0.35		0.144	1.000	2.000	(0.856)	Zero	✓
Community Parks:									
Oaken Hills Memorial Park	4.25	4.25							
Lamson Park	<u>10.90</u>	<u>4.50</u>							
	15.15	8.75		3.588	2.000	6.000	1.588	79%	✓
Greenways/Natural Areas									
Hampton Pond at Huddleston Park	<u>13.20</u>	<u>6.60</u>							
	13.20	6.60		2.706	2.000	6.000	0.706	35%	✓
Subtotal Parks	<u>29.03</u>	<u>16.03</u>		<u>6.57</u>	<u>5.25</u>	<u>14.50</u>	<u>1.32</u>	25%	
Bike and Pedestrian Crossings			-	0.000	0.500	1.500	(0.500)	Zero	✓

Notes:

¹ Oregon Parks and Recreation Department 2013-18 Statewide Comprehensive Outdoor Recreation Plan (SCORP); 2020 estimated population; level of service expressed in units per 1,000 residents 2,439

As the data in Table 28 shows, currently, the City is “park deficient” in all park categories except community parks and greenways/natural areas.. This will impact the calculation of the parks SDC reimbursement fee in that the current LOS implies 75% of the City's current parks and trails capacity is being absorbed by the City's current population.

Existing and Projected Future Demand for Parks and Trails

Growth should be measured in units that most directly reflect the source of demand. In the case of parks, the most applicable units of growth are population and, where appropriate, employees (or new jobs). ORS 223.29 to 223.314 allow local governments to impose parks and recreation SDCs on non-residential development as well as on residential development. The Willamina program imposes parks and

recreation SDCs on new residential development and does not impose SDCs on non-residential development.

However, the units in which demand is expressed may not be the same as the units in which SDC rates are charged. Many SDCs, for example, are charged on the basis of new dwelling units. Therefore, conversion is often necessary from units of demand to units of payment. For example, using an average number of residents per household, the number of new residents can be converted to the number of new dwelling units.

Parks and recreation facilities benefit City residents, businesses, non-resident employees, and visitors. The methodology used to update the City's parks and recreation SDCs establishes the required connection between the demands of growth and the SDC by identifying specific types of park and recreation facilities and analyzing the proportionate need of residents and employees for each type of facility. The SDCs to be paid by a development meet statutory requirements because they are based on the nature of the development and the extent of the impact of that development on the types of park and recreation facilities for which they are charged.

The parks and recreation SDCs are calculated based on the specific impact a development is expected to have on the City's population. For facilities that benefit residents, an SDC may be charged for residential development.

Table 29 contains existing and projected population, housing units, and employment for the City. The data in this table establishes the units of demand and the units of payment for the reimbursement and improvement parks SDCs.

Table 29 - Existing and Projected Population, Housing Units, and Employment

	2019 Census Est.	2020 PSU Est.	2040 Projected	Analysis of Growth	
				Units	CAGR*
1 Population	2,439		2,996	557	0.98%
Single family residential	2,188		2,688	500	
Multi-family residential	251		308	57	
2 Total Housing Units	971		1,193	222	
Single family residential	856		1,051	195	
Multi-family residential	115		141	26	
Number of persons per Housing Unit	2.51				
Single family residential	2.56				
Multi-family residential	2.18				
3 Employment	1,054		1,295	241	1.03%
Employment to population ratio	43.21%				

Data Sources and Notes:

- 1** Current population source: U.S. Census Bureau, 2020 American Community Survey 5-year summary, Table DP05; 2040 projection per Population Research Center, Portland State University, June 30, 2017
- 2** Current Housing units source: U.S. Census Bureau, 2020 American Community Survey 5-year summary, Table DP04, Table B25024, B25033; 2040 projection based on 2019 number of persons per occupied housing unit
- 3** Current employment source: U.S. Census Bureau, 2020 American Community Survey 5-year summary, Table DP03; 2040 projection based on 2019 employment to population ratio

* CAGR - Compound Annual Growth Rate

Reimbursement Fee Calculations

As we discussed above, the City is park deficient in all park categories except community parks and greenways/natural areas. This has adversely impacted the calculation of the parks SDC reimbursement fee in that the current LOS implies 75% of the City's current parks and trails capacity is being absorbed by the City's current population. That mean only 25% of the system's-built capacity is available to serve growth. The calculated parks reimbursement fee calculations are shown below in Table 30.

Table 30 - Calculation of the Parks Reimbursement Fee

	Book Value	Capacity Remaining to Serve Growth	Residential	Non-Residential
Utility Plant-in-Service: ¹				
1400 Land	\$ 60,308	\$ 15,195	\$ 15,195	\$ -
1420 Land Improvements	218,906	55,155	55,155	-
1430 Buildings	80,462	20,273	20,273	-
1440 Equipment	6,263	1,578	1,578	-
1460 Vehicles	7,547	1,902	1,902	-
Total Utility Plant-in-Service	\$ 373,486	\$ 94,103	\$ 94,103	\$ -
Eliminating entries:				
Principal outstanding on bonds, notes, and loans payable		-	-	-
Grants and contributions		-	-	-
Total eliminating entries		-	-	-
Net basis in utility plant-in-service available to serve future customers		94,103	94,103	-
<i>Future Demand Units:</i>				
Growth in population (People)			557	
Growth in occupied housing units:				
Single family residential			195	
Multi-family residential			26	
Growth in employment (Employees)				241
<i>Unit reimbursement fee Parks SDCs:</i>				
Per person			\$169	
Per occupied housing unit:				
Single family residential			\$432	
Multi-family residential (per unit)			\$369	
Per employee				\$0

¹ Source: Willamina Accounting Summary Report - Capitalized Assets as of June 30, 2020

Parks CIP

The 2021 Parks and Open Space CIP lays out a very specific and prioritized capital improvement plan for the City through 2040. The CIP identifies future costs for new parks and trails, and the future costs for improvements to the City's existing parks inventory. The total CIP from the Plan is shown below in Table 31.

Table 31 - 2021 Parks CIP

ID#	Item Description	June, 2021 Est.	Park Category						Other
			Pocket Parks	Neighborhood Parks	Community Parks	Greenways & Natural Areas	Bike, Ped, Trails		
Park Improvements									
1	Oaken Hills	\$ 332,713	\$ -	\$ -	\$ 332,713	\$ -	\$ -	\$ -	
2	Garden Spot	6,100	6,100	-	-	-	-	-	
3	Lamson	165,600	-	-	165,600	-	-	-	
4	Triangle Park	12,500	12,500	-	-	-	-	-	
5	City Hall/Tina Miller	10,800	-	10,800	-	-	-	-	
6	Hampton Park - Huddleston Pond	2,800,000	-	-	-	2,800,000	-	-	
7	New Splash Pad Park Northwest Side of Oaken Hills	608,716	-	-	608,716	-	-	-	
8	New Black Water Dog Park	2,108,300	-	-	2,108,300	-	-	-	
9	New Pocket Park between 1st Street and E Street	238,872	238,872	-	-	-	-	-	
10	Universal Pathway	-	-	-	-	-	-	-	
Total Priority Improvements		\$ 6,283,601	\$ 257,472	\$ 10,800	\$ 3,215,329	\$ 2,800,000	\$ -	\$ -	

SDC Eligibility of Parks CIP

For purposes of this SDC study, each of the City's park facilities falls into one of the following five categories:

- Pocket parks
- Neighborhood parks
- Community parks
- Greenways/Natural areas
- Bike and pedestrian pathways

Table 32 compares the current inventory of facilities in each category with that category's adopted level of service. That comparison leads to a determination of surplus or deficiency for each category. Projects are eligible for improvement fee funding only to the extent that the projects will benefit future users. Therefore, only the categories with no deficiency (community parks) are eligible for improvement fee funding. The eligibility percentages of the remaining parks categories are reduced to reflect the level of deficiency.

Table 32 - Calculation of Parks CIP SDC Eligibility

Classification	LOS (units/1,000 population) ^{1, 2}	Inventory Units	Parks Inventory at			Level of Service Analysis		Parks SDC Eligibility	
			Current ²	Planned Additions ³	Planned 2040	Current need	Surplus / (Deficiency)	Growth Need	Growth %
Pocket Parks	0.25	Acres	0.33	0.42	0.75	0.61	(0.28)	0.14	33.31%
Neighborhood Parks	1.00	Acres	0.35	2.65	3.00	2.44	(2.09)	0.56	21.05%
Community Parks	2.00	Acres	8.75	-	5.99	4.88	3.87	1.11	12.73%
Greenways/Natural Areas	<u>2.00</u>	Acres	<u>6.60</u>	<u>-</u>	<u>5.99</u>	<u>4.88</u>	<u>1.72</u>	<u>1.11</u>	<u>16.88%</u>
Subtotal Parks	5.00		16.03	3.06	15.73	12.80	3.23	2.92	
Bike and Pedestrian Pathways	0.50	Miles	-	1.50	1.50	1.22	(1.22)	0.28	18.59%

¹ PSU service area population estimate 2020 2,439

Level of Service expressed in units per 1,000 residents 2.44

Estimated 2040 service population per PSU 2,996

Level of Service expressed in units per 1,000 residents 3.00

² 2014 Parks and Recreation Needs Assessment; page 10

³ Planned additions to attain 2013-17 SCORP level of service

Improvement Fee Calculations

The improvement fee is the cost of capacity-increasing capital projects per unit of growth that those projects will serve. The unit of growth, the number of new residents, is the basis of the fee. In reality, the capacity added by many projects serves a dual purpose of both meeting existing demand and serving future growth. To compute a compliant SDC rate, growth-related costs must be isolated, and costs related to current demand must be excluded. We have used the “capacity approach” to allocate costs to the improvement fee basis. Under this approach, the cost of a given project is allocated to growth in proportion to the growth-related capacity that projects of a similar type will create. The capacity analysis of the parks CIP is shown numerically in Table 32. Table 33 lays out the capacity approach to deriving the parks improvement fee.

Table 33 - Calculation of the Parks Improvement Fee

Classification	Total MP CIP	SDC Eligible %	<----- Funding Sources for Parks CIP ----->			
			Existing Users	Total SDC	Residential	Non-Residential
Pocket Parks	257,472	33.31%	171,707	85,765	85,765	-
Neighborhood Parks	10,800	21.05%	8,527	2,273	2,273	-
Community Parks	3,215,329	12.73%	2,806,026	409,303	409,303	-
Greenways/Natural Areas	2,800,000	16.88%	2,327,457	472,543	472,543	-
Trails	-	18.59%	-	-	-	-
Total	\$ 6,283,601	15.44%	\$ 5,313,717	\$ 969,884	\$ 969,884	\$ -

	Total SDC	Residential	Non-Residential
Future parks master plan capacity-expanding costs	\$ 969,884	\$ 969,884	\$ -
Adjustments to improvement fee basis:			
Parks improvement fee SDC fund balance	-	-	-
Adjusted future parks master plan capacity-expanding costs	\$ 969,884	\$ 969,884	\$ -

Future Demand Units:

Growth in population (People)	557
Growth in occupied housing units:	
Single family residential	195
Multi-family residential	26
Growth in employment (Employees)	

Unit improvement fee Parks SDCs:

Per person	\$ 1,741
Per occupied housing unit:	
Single family residential	\$ 4,450
Multi-family residential (per unit)	\$ 3,800
Per employee	

Parks SDC Model Summary

The 2021 parks SDC update was done in accordance with Willamina Municipal Code Chapter 33, and with the benefit of the adopted parks CIP. We recommend the City update the SDC charge reflect the current capital improvement program. The complete proposed schedule of parks SDCs is shown below in Table 34.

Table 34 - Proposed Parks SDCs

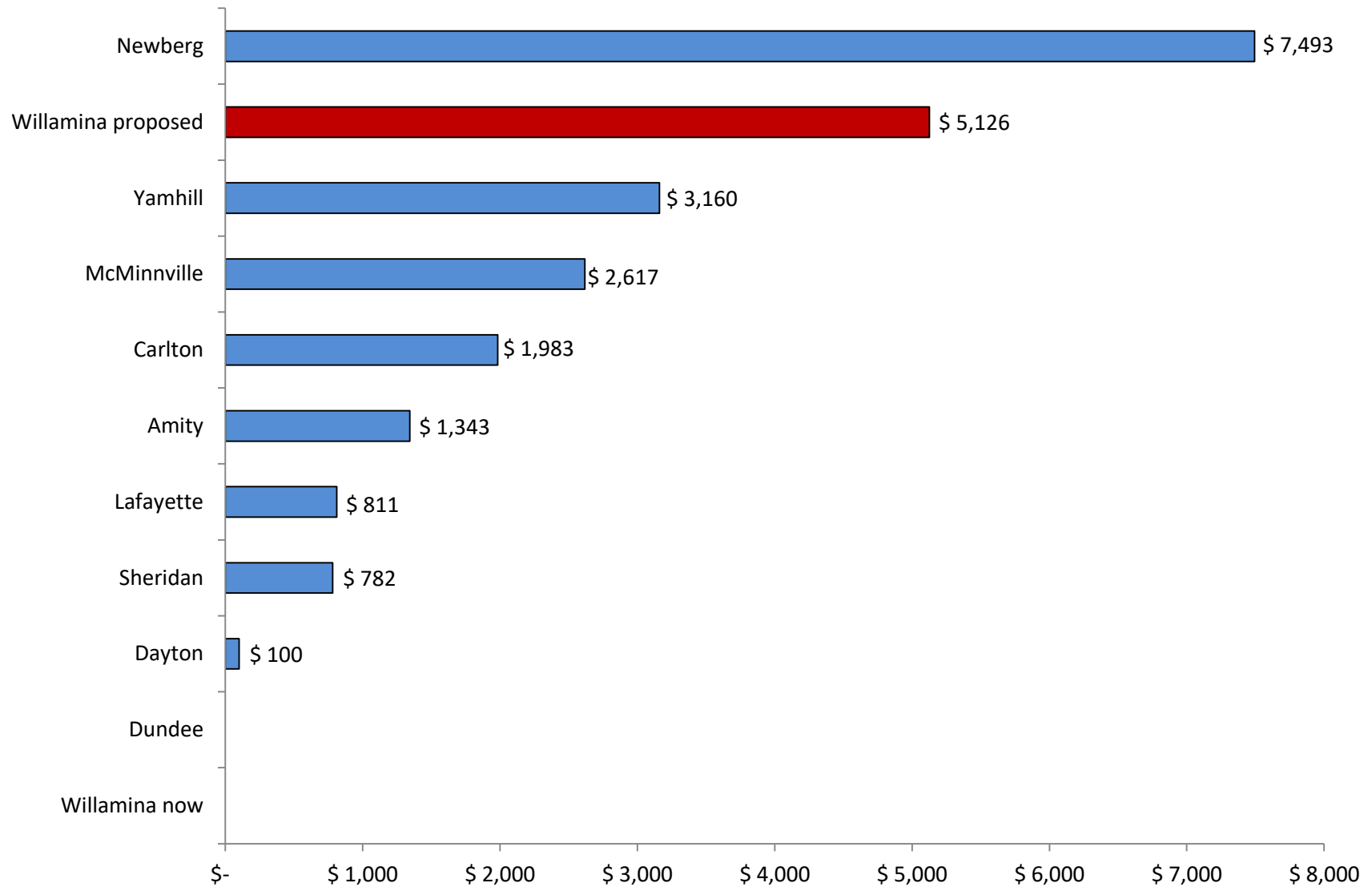
Customer Classification	Number of Dwelling Units	Proposed Schedule of Parks SDCs			
		Reimbursement	Improvement	Administration	Total
Detached single family	1	\$ 432	\$ 4,450	\$ 244	\$ 5,126
Mobil/manufactured home	1	432	4,450	244	5,126
Multifamily - \$/dwelling unit	1	369	3,800	208	4,377
Duplex	2	738	7,600	417	8,754
Tri-plex	3	1,106	11,400	625	13,132
Four-plex	4	1,475	15,200	834	17,509
Apartment complex	*	*	*		*
Condominium complex	*	*	*		*
Retirement/Assisted Living cc	*	*	*		*
Business - \$/FTE Employee		\$ -	\$ -	\$ -	\$ -

* - multiply the number of dwelling units by the corresponding detached multi-family per dwelling unit fee component

Parks SDCs in Neighboring Communities

Shown below in Figures 7 is a chart that compares the current and proposed Parks SDC for a single-family customer in Willamina to the same charge in similar communities in Yamhill County.

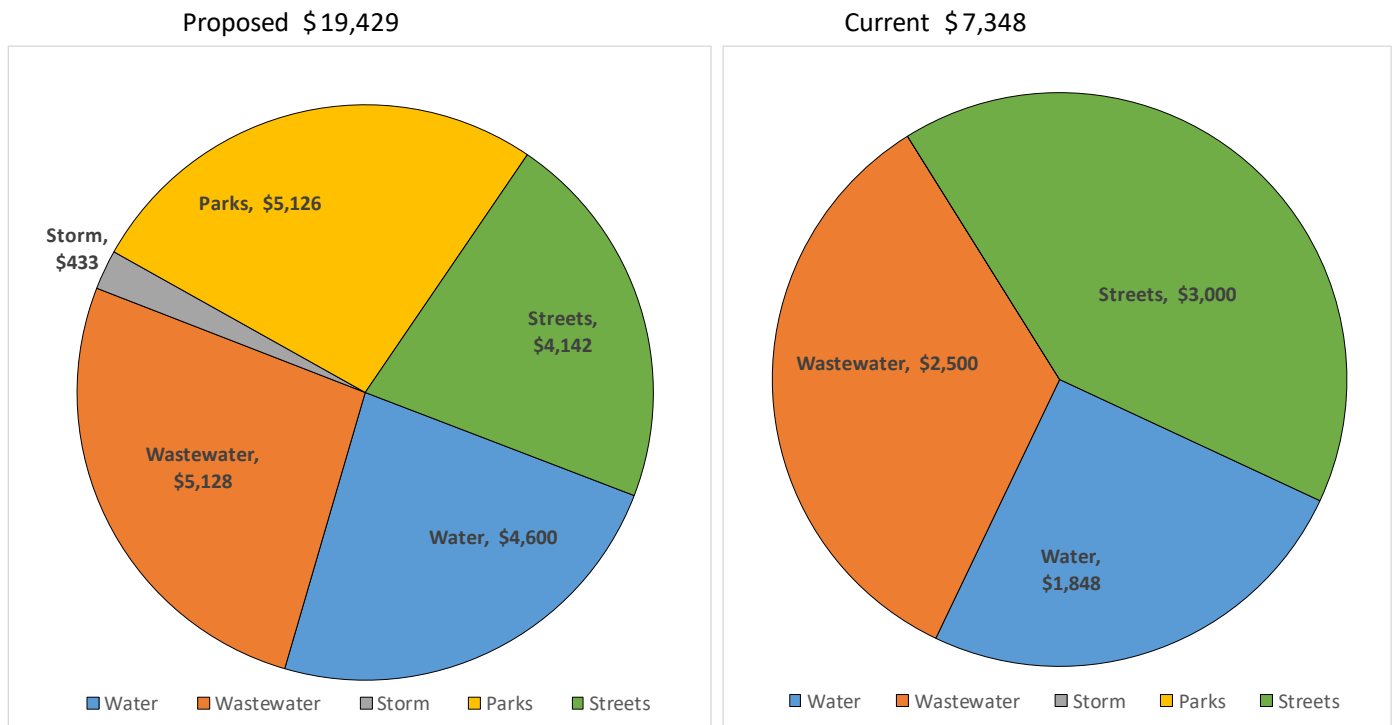
Figure 7 - Neighboring Communities' Parks SDCs (Detached Single Family) July, 2021



Conclusions and Recommendations

The 2021 SDC update was done in accordance with WMC Chapter 33, and with the benefit of adopted plans and plan updates for municipal services. A graphic side by side comparison of the proposed and current schedule of SDCs is shown blow in figure 8.

Figure 8 - Proposed and Current Schedule of SDCs



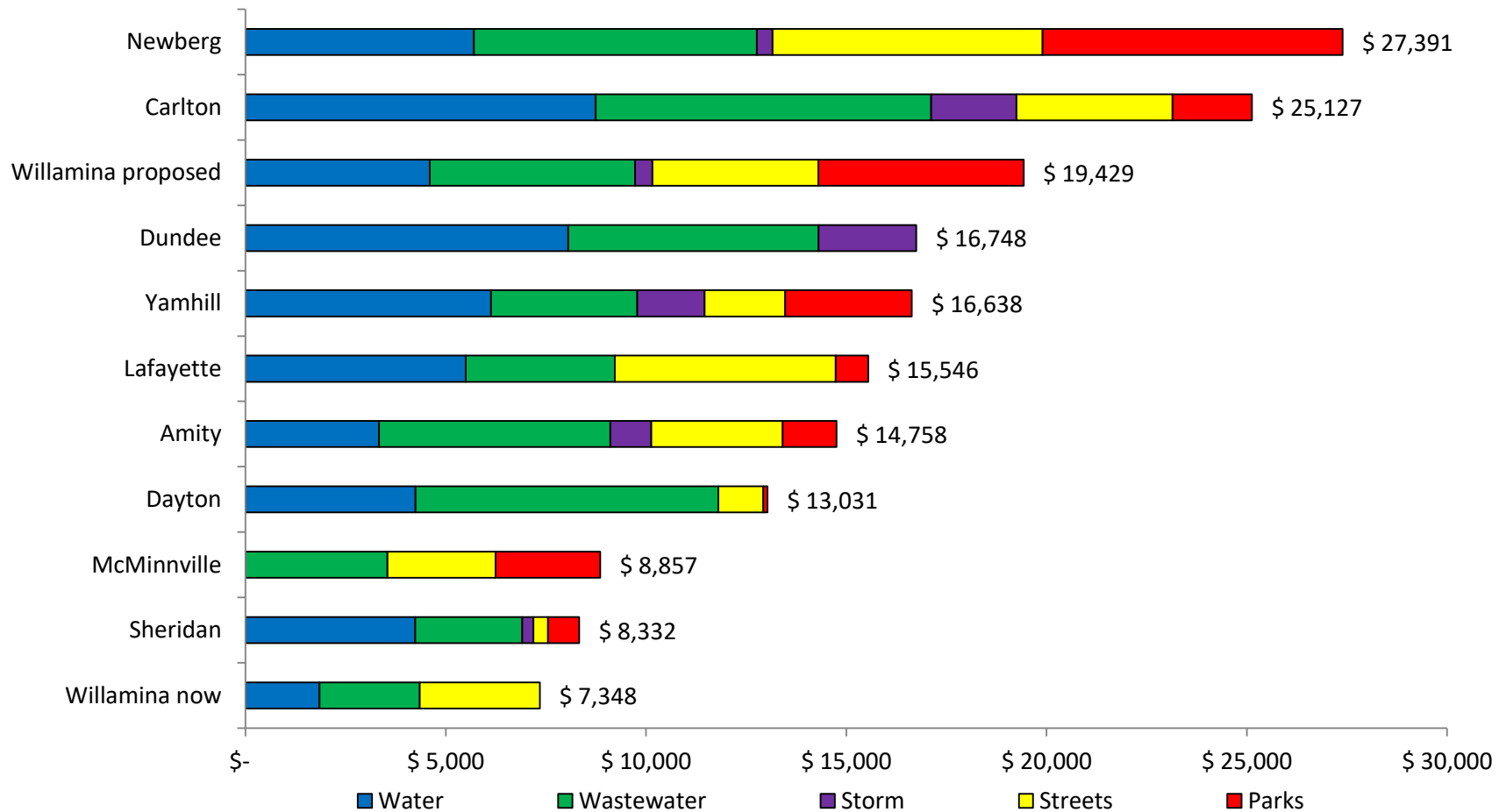
Finally, we recommend the City adopt a policy of reviewing its suite of SDCs every five years. Between the review dates, the city should apply a cost adjustment index to the SDC rates annually to reflect changes in costs for land and construction. This policy should be codified in the Willamina Municipal Code (WMC §33.31). We suggest the City consider the following language for that section of the WMC:

1. Notwithstanding any other provision, the dollar amounts of the SDC set forth in the SDC methodology report shall on January 1st of each year be adjusted to account for changes in the costs of acquiring and constructing facilities. The adjustment factor shall be based on:
 - a. The change in construction costs according to the Engineering News Record (ENR) Construction Cost Index (CCI) (20 City Average).
 - b. The system development charges adjustment factor shall be used to adjust the system development charges, unless they are otherwise adjusted by the city based on a change in the costs of materials, labor, or real property; or adoption of an updated methodology.

Neighboring Communities' SDCs

Shown below in Figure 9 is a chart that compares the current SDCs for a single-family customer in Willamina to the same charges in similar communities in Yamhill County and Oregon.

Figure 9 - Neighboring Communities' SDCs (Detached Single Family) July, 2021



Appendix A – PSU Coordinated Population Forecast for Willamina

Figure 1. Yamhill County and Sub-Areas—Historical and Forecast Populations, and Average Annual Growth Rates (AAGR)

Area	Population (2000)	Population (2010)	AAGR (2000-2010)	Population (2020)	Population (2045)	Population (2070)	AAGR (2010-2020)	AAGR (2020-2045)	AAGR (2045-2070)
Yamhill County	84,992	99,193	1.6%	105,911	134,702	167,672	0.6%	1.0%	0.9%
Amity	1,481	1,623	0.9%	1,733	2,083	2,468	0.6%	0.7%	0.7%
Carlton	1,514	2,007	2.9%	2,329	3,313	4,577	1.5%	1.4%	1.3%
Dayton	2,244	2,708	1.9%	2,778	3,488	4,325	0.2%	0.9%	0.9%
Dundee	2,672	3,162	1.7%	3,139	4,195	5,477	-0.1%	1.2%	1.1%
Gaston (Yamhill)	110	154	3.4%	154	189	227	0.0%	0.8%	0.7%
Lafayette	2,597	3,753	3.8%	4,146	6,554	9,721	1.0%	1.8%	1.6%
McMinnville	26,709	32,527	2.0%	34,564	44,539	56,047	0.6%	1.0%	0.9%
Newberg	18,558	22,572	2.0%	24,877	34,929	47,258	1.0%	1.4%	1.2%
Sheridan	5,581	6,210	1.1%	6,102	7,232	8,389	-0.2%	0.7%	0.6%
Willamina (Yamhill)	1,128	1,180	0.5%	1,247	1,425	1,590	0.5%	0.5%	0.4%
Yamhill City	805	1,024	2.4%	1,090	1,430	1,823	0.6%	1.1%	1.0%
Outside UGBs	21,593	22,273	0.3%	23,752	25,326	25,771	0.6%	0.3%	0.1%

Figure 1 Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC). Note: For simplicity each UGB is referred to by its primary city's name.

Table 2. Historical and forecasted population and AAGR in Polk County and its sub-areas.

	Historical			Estimates		Forecast			
	2000	2010	AAGR (2000-2010)	2020	AAGR (2010-2020)	2045	2070	AAGR (2020-2045)	AAGR (2045-2070)
Polk County	62,380	75,403	1.9%	83,805	1.1%	128,783	189,106	1.7%	1.5%
Outside UGBs	13,807	14,055	0.2%	15,057	0.7%	20,076	25,926	1.2%	1.0%
Larger Sub-Areas									
Dallas	13,260	15,432	1.5%	17,201	1.1%	27,568	43,635	1.9%	1.8%
Independence	6,353	8,867	3.3%	9,851	1.1%	18,636	30,695	2.6%	2.0%
Monmouth	7,210	8,474	1.6%	10,022	1.7%	16,527	24,034	2.0%	1.5%
Salem (part)*	20,013	26,716	2.9%	29,768	1.1%	43,222	60,836	1.5%	1.4%
Smaller Sub-Areas									
Falls City	999	971	-0.3%	1,000	0.3%	1,429	1,983	1.4%	1.3%
Willamina (part)*	739	888	1.8%	905	0.2%	1,324	1,998	1.5%	1.6%

Sources: U.S. Census Bureau; PRC Estimates; Forecast by Population Research Center (PRC).

	Population Estimates		
	2020	2045	CAGR
Willamina (Yamhill)	1,247	1,425	0.54%
Willamina (Polk)	905	1,324	1.53%
Willamina total	2,152	2,749	0.98%

Appendix B – Historical Price Movements in the Engineering News Record Construction Cost Index

HOW ENR BUILDS THE INDEX: 200 hours of common labor at the 20-city average of common labor rates, plus 25 cwt of standard structural steel shapes at the mill price prior to 1996 and the fabricated 20-city price from 1996, plus 1.128 tons of portland cement at the 20-city price, plus 1,088 board ft of 2 x 4 lumber at the 20-city price.

ENR'S CONSTRUCTION COST INDEX HISTORY (1990-2020)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG.	Annual Percent Change
2021	11628	11699	11750	11849	11990	12112	12237	12464						
2020	11392	11396	11397	11412	11418	11436	11439	11455	11499	11539	11579	11626	11466	1.46%
2019	11206	11213	11228	11228	11230	11268	11293	11311	11539	11326	11381	11381	11300	2.16%
2018	10878	10889	10959	10971	11013	11069	11116	11124	11170	11183	11184	11186	11062	3.04%
2017	10531	10559	10667	10678	10692	10703	10789	10826	10823	10817	10870	10873	10736	3.84%
2016	10132	10181	10242	10279	10315	10337	10379	10385	10403	10434	10442	10530	10338	3.02%
2015	9972	9962	9972	9992	9975	10039	10037	10039	10065	10128	10092	10152	10035	2.33%
2014	9664	9681	9702	9750	9796	9800	9835	9846	9870	9886	9912	9936	9807	2.72%
2013	9437	9453	9456	9484	9516	9542	9552	9545	9552	9689	9666	9668	9547	2.56%
2012	9176	9198	9268	9273	9290	9291	9324	9351	9341	9376	9398	9412	9308	2.63%
2011	8938	8998	9011	9027	9035	9053	9080	9088	9116	9147	9173	9172	9070	3.08%
2010	8660	8672	8671	8677	8761	8805	8844	8837	8836	8921	8951	8952	8799	2.67%
2009	8549	8533	8534	8528	8574	8578	8566	8564	8586	8596	8592	8641	8570	3.13%
2008	8090	8094	8109	8112	8141	8185	8293	8362	8557	8623	8602	8551	8310	4.30%
2007	7880	7880	7856	7865	7942	7939	7959	8007	8050	8045	8092	8089	7967	2.78%
2006	7660	7689	7692	7695	7691	7700	7721	7722	7763	7883	7911	7888	7751	4.10%
2005	7297	7298	7309	7355	7398	7415	7422	7479	7540	7563	7630	7647	7446	4.65%
2004	6825	6862	6957	7017	7065	7109	7126	7188	7298	7314	7312	7308	7115	6.28%
2003	6581	6640	6627	6635	6642	6694	6695	6733	6741	6771	6794	6782	6695	2.39%
2002	6462	6462	6502	6480	6512	6532	6605	6592	6589	6579	6578	6563	6538	3.09%
2001	6281	6272	6279	6286	6288	6318	6404	6389	6391	6397	6410	6390	6342	1.94%
2000	6130	6160	6202	6201	6233	6238	6225	6233	6224	6259	6266	6283	6221	2.67%
1999	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127	6060	2.35%
1998	5852	5874	5875	5883	5881	5895	5921	5929	5963	5986	5995	5991	5920	1.64%
1997	5765	5769	5759	5799	5837	5860	5863	5854	5851	5848	5838	5858	5825	3.61%
1996	5523	5532	5537	5550	5572	5597	5617	5652	5683	5719	5740	5744	5622	2.76%
1995	5443	5444	5435	5432	5433	5432	5484	5506	5491	5511	5519	5524	5471	1.18%
1994	5336	5371	5381	5405	5405	5408	5409	5424	5437	5437	5439	5439	5408	3.78%
1993	5071	5070	5106	5167	5262	5260	5252	5230	5255	5264	5278	5310	5210	4.53%
1992	4888	4884	4927	4946	4965	4973	4992	5032	5042	5052	5058	5059	4985	3.10%
1991	4777	4773	4772	4766	4801	4818	4854	4892	4891	4892	4896	4889	4835	2.18%
1990	4680	4685	4691	4693	4707	4732	4734	4752	4774	4771	4787	4777	4732	